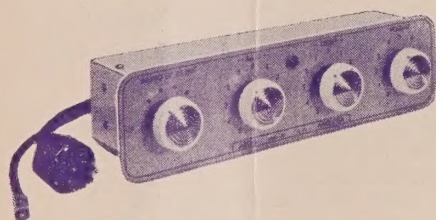
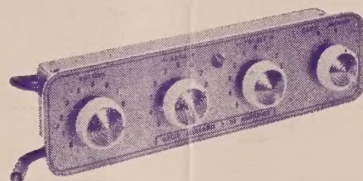
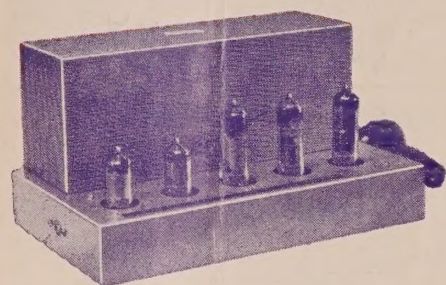


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EDITORIAL

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Recommendations for an Australian Federal Communications Commission

On 5th May in the House of Representatives during Grievance Day debate, the Honorable A. Fairhall, Federal Member for Paterson (N.S.W.), directed a recommendation to the Government that consideration be given to the establishment in Australia of a counterpart of the American Federal Communications Commission, and as a first step towards this end that the Government invite to Australia one of the American commissioners to advise as to how this problem should be tackled.

The American F.C.C. is an independent body empowered to deal with all communication problems in the United States of America including the allotment of operating frequencies to the various communication services.

The Amateur Service—which vitally interests us—is administered by the F.C.C., but in a far different manner to that existing in this country. Under an independent Commission the American Amateur has considerable say in his own affairs as a recognised international frequency user. Proposals to make variations in regulations governing the operation of Amateur Stations are published in a Federal Register wherein all interested parties are invited to file comments for or against the proposal(s). The Amateurs are thus given the opportunity to give expressions of opinion in matters which concern themselves.

Proposals may be originated by the American Radio Relay League (the representative body of the Amateur Service) in the form of a petition to the F.C.C. But whether such proposals are originated by the F.C.C. or the A.R.R.L., the F.C.C. issues a document of proposed rule making which is published in the Federal Register, and it is only after individual and institutional comments have been thoroughly exam-

ined by the Commissioners (who are not themselves frequency users) that any order to amend Regulations under the Communications Act is implemented.

The American Communications Act incorporates Amateur regulations along with regulations governing the operation of all other frequency users and these are legally binding until such time as they are amended by a properly constituted procedure by which the frequency users have a powerful say in their own affairs.

Because Australia is a growing Nation with a bigger voice in international affairs, its system of dealing with communications, whilst having served satisfactorily since the introduction of radio as a communication media, is fast outgrowing its usefulness and is in dire need of complete overhauling.

The Wireless Institute of Australia as the nationally constituted organisation representing the internationally registered Amateur Service in Australia commends Mr. Fairhall for his stand on this matter and looks forward in the hope that the Australian Government will see the wisdom of his recommendation.

In the meantime the Postmaster-General, Hon. C. W. Davidson, O.B.E., has said that he will form an Ad Hoc Committee with wide constitutional facilities so that all the interests involved with the use of frequencies will have an opportunity to present their cases. In this regard Mr. Davidson has said that the Wireless Institute of Australia will have actual representation on this Committee and not merely be invited to send an observer. The W.I.A. assures all Australian Amateurs that it will be pleased to represent their interests on this Committee when it is formed.

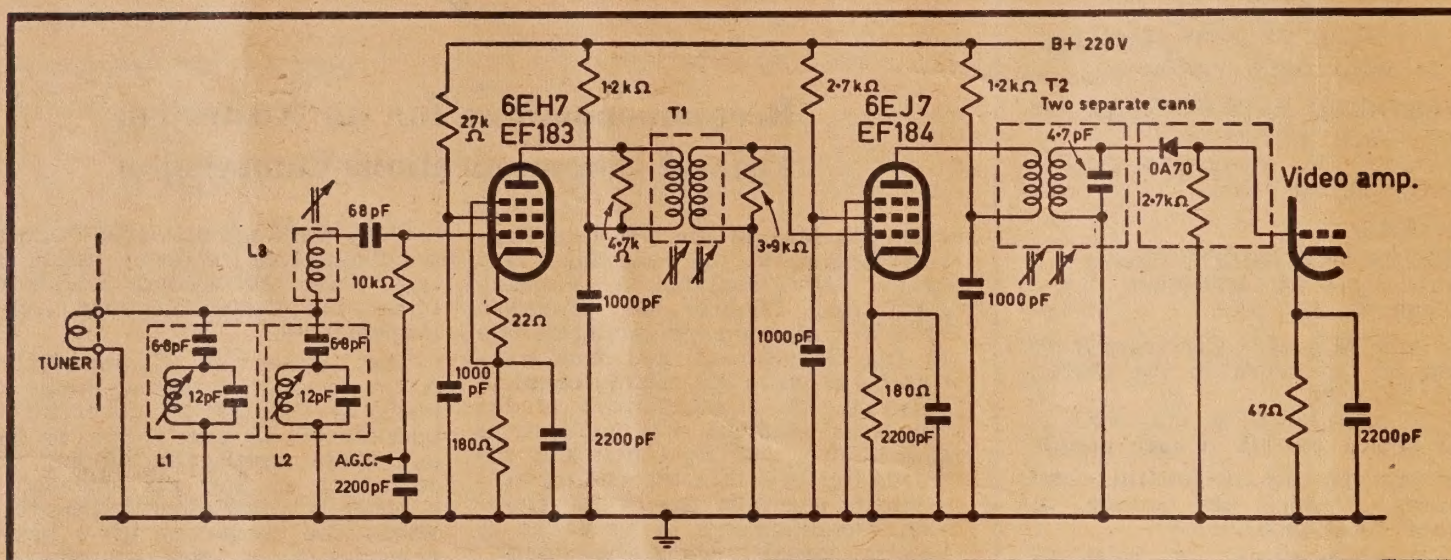
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I _{g2}	4.2mA	3.8mA
g _m	†12.5mA/V	15mA/V
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In Defence of Amateur Frequencies

For the information of Amateurs generally, we print herewith extracts from Hansard (5th May, 1960) indicating the support that has been given to Amateurs by Mr. Fairhall, M.H.R.; Mr. Costa, M.H.R.; and Mr. Wentworth, M.H.R.

Mr. Fairhall (Paterson).—Mr. Speaker, twelve months ago, the subject of the availability of frequency reservations to amateur radio operators in this country was a matter of hot concern in both Houses of this Parliament and on both sides of the Parliament. In the light of known proposals for the reduction of the frequency channels which the Postmaster-General's Department proposed to send on for consideration at the International Telecommunications Union Conference, in Geneva, last year, that was a reasonable thing. But I think it is timely and necessary to raise the question again, because, presumably, in the near future, the Government will have before it a submission from the department dealing with the results of the Geneva conference and moving for some form of ratification, as may be required. Therefore, cause a good deal of discontent over the outcome of the Geneva conference still lingers, I consider that there are some important matters which ought to be brought to the attention of the Government, and, perhaps, to the notice of the people of Australia, Sir. These matters are not confined only to amateur radio, and what has happened in this field gives rise to wider considerations.

I do not want to say much about the value of the amateur radio operator in peace and war—I think that is well understood—or, indeed, about the fact that amateur radio represents a training ground for electronic technicians in this country which is particularly valuable in view of the few opportunities available for obtaining experience of that sort. I propose also to pass lightly over the recognition given to radio amateurs, because it is well known that they are regarded as an international group, and that reservations have been made for them on an international basis by the International Telecommunications Union.

In the United States of America and the United Kingdom, amateur operators are considered of such value that the delegations sent to the Geneva conference by those countries fought hard, and, I am happy to say, retained for their amateurs the whole field of reservations for amateur operation. In the United Kingdom, amateur radio is encouraged as a source of operators for signals branches of the defence services, even to the degree that the Government provides equipment and pays something towards the cost of its maintenance. In Australia, in recent years, the president of the Wireless Institute of Australia—the organisation of amateur operators—was awarded an O.B.E.—the award of admission as an Officer of the Order of the British Empire—in recognition of the splendid service given by the amateurs of this country during floods and bush fires on many occasions when the communication

facilities provided by the Postmaster-General's Department had been disrupted for some reason.

For years past, the Australian amateur has had available to him fewer frequency channels than are available to amateur operators in other English-speaking countries. In this connection, I wish to direct attention to a statement made on 7th May, 1959, by the Postmaster-General (Mr. Davidson). He said—

... my advice—and it is the best advice—is that Australian radio amateurs do not suffer by comparison with our American friends.

That statement is demonstrably untrue, Sir, and it can readily be tested. I have done that. The useful bands available to Australian amateur operators represent only 85 per cent. of those available to the American operators. On the channels best suited to international communication, which is the very life blood of amateur radio, they are restricted to 56 per cent. of those available to the Americans. If the Geneva conference decision is to be put into operation, including a restriction, applicable to Australia only, to which I shall refer presently, we shall be down to something like 50 per cent. of the space available to the Americans. Nor does that tell all the story, because the Australian amateur suffers disadvantages in respect of power and other matters as a result of conditions imposed on them by the Postal Department.

The point to which I wish to direct attention, and which I should like the Postmaster-General to note, is that when this matter was one of hot concern twelve months ago, honorable members on both sides of the House were given an undertaking, which I must accept as coming from the Minister's own department, that the Australian amateur would lose nothing further by way of frequency reservations unless such restrictions were demanded by the International Telecommunications Conference at Geneva.

Let me illustrate by taking one point—the band of frequencies available to amateurs on 80 metres. The Australian delegation took forward a proposal to reduce the Australian allocation from 300 kilocycles to 200 kilocycles. They put it before the conference, and we had no objection, but the conference rejected the Australian proposal. One would assume that that would be the end of that, but no, the Australian delegation then included what is called in convention parlance a "footnote". The footnote interposed into the articles of the convention the Australian restriction down to 200 kilocycle bandwidths. The inclusion of this footnote in the proceedings of the Geneva conference was, as I see it, and as many other members of this Parliament will see it, a repudiation of the undertaking given to the Parliament.

I hope that this does not indicate a state of mind in which this Parliament is to be held in contempt by a government department. I should like to hear what the Postmaster-General has to say about this. For my part, I cannot see

that this was other than a premeditated act of bad faith on the part of the administration. As such, I find it completely intolerable.

Various reasons have been put forward why Australian amateur reservations must be reduced. We have been told that there is a rising demand for frequency channels for other communication services. Of course, that is perfectly true. Quoting the Postmaster-General's own figures in relation to the aeronautical field, the applications have risen from 59 to 172; but in this field, the United States of America manages to operate 81,000 transmitters. Some of our members were concerned that if the amateur bands were not reduced, there would be no room available for the operation of bush fire radio equipment; but in the closest counterpart of this service that I could find in the American table, I find the Americans can operate no fewer than 92,000 transmitters.

This takes me out of the field of amateur frequencies altogether, and it brings up a wider question as to what is happening in frequency allocations in Australia. In times past, I have made the point that we should have a counterpart in Australia of the American Federal Communications Commission. I know that the Postmaster-General has indicated that quite shortly we are to have another committee in Australia to examine the broad question of frequencies. I want to put to the Minister two propositions: One is that we should consider the establishment of an administrative body similar to the American Federal Communications Commission, and towards that end it might not be a bad thing for the Government to invite to Australia one of the American commissioners, and to seek his advice as to how this problem should be tackled.

I put this seriously to the House and the people that, in Australia, one of our most valuable public possessions will be the ownership and availability of channels or communication in a big country; yet what have been given as the reasons for doing the things to which I have referred? We find that we, in Australia, have virtually exhausted the availability of communication channels with something under 50,000 transmitters, yet in a country of the same physical size, and having access to widths of frequencies identical with ours, the American administration is able to operate something like 1,400,000 transmitters. I say again that this is a vital matter, because I am not at all convinced that this question of frequency allocation is being administered in the public interest. When one sees a comparison of that kind—that we can operate only 4,000 transmitters in an area which can accommodate almost 1,500,000 in America—we are seriously invited to consider the efficiency of our handling of this particular problem.

But, Sir, if I may get back to the question of amateur radio, there is no sustainable reason why the amateurs of Australia should suffer further reductions in their wave bands. On the contrary, there is good reason why a

reasonable administration should restore some space that has been withheld or withdrawn without justification. Sir, I should like to have the Postmaster-General devote his attention to this matter and give me some advice as to how far we are committed by the Geneva agreement in its present form, what facilities there are for amendment or change in the conditions involved in it, and also whether the Government will look at this matter again with a view to giving some relief.

Mr. Costa (Banks).—I wish to support the honorable member for Paterson (Mr. Fairhall). I think that the point of view he has put to the House has the support of all honorable members. I support his protests because I believe there should be ample channels available for radio amateurs, to whom we owe quite a lot. They pioneered the radio industry in Australia and they deserve our support. I oppose the restrictions that have been suggested by the Geneva conference.

Mr. Davidson (Dawson; Postmaster-General).—Normally, on Grievance Day, it is not the practice for Ministers to take up any of the time of the debate. Honorable members greet that statement with noisy interjections, but if they will allow me to make a few remarks they will find that I have risen, first because I want to make a few comments in reply to the speech of the honorable member for Paterson (Mr. Fairhall), and secondly, because the honorable member for Macarthur (Mr. Jeff Bate) also asked me to make some comments on that matter and was good enough to offer me his time in this debate so that I might do so. I appreciate that action of the honorable member.

As only a few minutes remain of the time allotted for this debate, I shall not attempt to reply to all the points made by the honorable member for Paterson. He has discussed with me on many occasions the matters he has raised today. Therefore I have an understanding of his point of view, and he understands my attitude. There are some things on which we differ and some on which we agree. I differ with him in respect of the charges he has made of repudiation and bad faith and his criticism of the attitude of departmental officers. Certainly the departmental officers have not agreed with all the proposals which have been put forward by the representatives of the amateur institute, but I think it must be conceded that a good deal of co-operation and consideration has been given by the department in the matters put forward by those representatives in discussions at both Canberra and Melbourne, and also by the appointment on behalf of the institute of an observer to travel with the delegation which went to Geneva. I should also like to point out—and this point has been raised by me before—that prior to the delegation leaving, I submitted a proposal to Cabinet outlining the attitude that would be adopted by the delegation. Therefore, if there is any comment or criticism in that respect it should be directed not at the departmental officers but at myself.

I particularly want to refer, in the next two or three minutes, to the present position and to our future planning. I think that is particularly what the honorable member for Paterson wants me to do. I have just received a summary of the portion of the report of the delegation to the Geneva talks which deals with frequencies allotted to amateur radio operators. It is my intention, very shortly, to submit this report to Cabinet for its consideration, and I can assure the House and the honorable member that any decision taken will be one of policy. I cannot anticipate what that will be. But before anything further is done, I shall recommend that a committee be set up to inquire into the matters referred to by the honorable member for Paterson. I propose proceeding with that on a very wide basis. There need be no fear, first of all, that any action which the amateurs might consider would hurt them will be taken immediately or without further opportunity being given for discussion. Secondly, any committee appointed to inquire into the whole range of frequencies in Australia will have a very wide constitution so that all the interests involved in the operation of frequencies will have an opportunity to present their cases. When I say that I mean, for example, that the amateur institute will have actual representation on the committee and not merely be invited to send an observer.

The honorable member for Paterson has suggested that this investigation should be wider and that we should set out to develop something in Australia of the nature of the Federal Communications Commission which operates in the United States of America. I am not very much attracted to that proposal at present; but I would be quite prepared to have a look at it, and if necessary, discuss it with Cabinet to see whether it thinks that a committee of that nature should be established. For the present, I fancy an ad hoc committee, which would not be appointed as a permanent body, would be the best means to deal with this matter with reasonable celerity.

Mr. Wentworth.—My question to the Postmaster-General relates to the International Telecommunications Conference which was held last December in Geneva. Was any agreement or convention entered into on behalf of Australia, or was anything done which was in any way binding on Australia? If so, will the Minister, before we go into recess, lay on the table of the Library for the information of honorable members a copy of the undertakings which were given?

Mr. Davidson.—Certain determinations were made by delegates to the Geneva conference, and those determinations were noted. But there has been no ratification by this Government of any of the decisions which were arrived at. Yesterday I received a summary of that part of the overall report which deals with amateur radio operators. It is my intention shortly to submit that summary to Cabinet for consideration and determination as to what further action should be taken. When such determination is made it is my intention to make a statement on the matter to the House.

TECH VACUUM TUBE VOLTMETER

Model PV-58

Designed to read DC, AC, Zero-Centre, RF and HV.
AC-DC Voltage ranges: 0-1.5, 5, 15, 50, 150, 500 and 1,500 volts.
Type HV-20 High Voltage Probe with in-built multipliers extends DC scale by a factor of 20, giving full scale readings of 0-30, 100, 300, 1,000, 3,000, 10,000 and 30,000 volts. Decibel scale available for level observations based on 1mW. into a 600 ohm line as zero db, corresponding to 0.774 volts AC on the 1.5 volt range. An AC volts/db. conversion chart supplied with each instrument as part of instruction booklet.

TECH Model PV-58 V.T.V.M.

£19/10/0 plus 12½% Sales Tax

Accessories:

RF-22 HIGH FREQUENCY PROBE

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TMK Model MG-310 MULTITESTER

Sensitivity 20,000 ohm/V. DC
10,000 ohm/V. AC

Ranges:

0-5, 25, 100, 500, 1,000 volts AC.
0-5, 25, 100, 500, 1,000, 5,000 volts AC.
DC Current: 0-1 microamp.; 0-5, 50, 500 mA.
Resistance: 0-60K, 600K, 0-6Mg., 60Mg. ohms.
Decibels: Minus 20 to plus 16 db., plus 30 db.

£8/5/0 plus 12½% Sales Tax

TECH POCKET VOLT-OHM METER, Model PT-34

Sensitivity 1,000 ohm/V. using
300 microamp. meter.

Ranges:

0-10, 50, 250, 500 and 1,000 volts AC/DC.
0-1 mA., 100 mA. and 500 mA.
0-100K and Infinity ohms.

44/- plus 12½% Sales Tax

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Compact, bandswitched, high power pi-coupler inductor for co-ax output.
Rated for a max. 1,200v. d.c. at 300 mA. input. Higher voltages on c.w. and s.s.b. For max. efficiency the 10-metre coil is made of in. silver-plated strip, 15 and 20-metre coils of 1/8 in. silver-plated wire, and the 40 and 80-metre coils of 12 B. & S. tinned-copper wire.
Input capacity 250 pF. max., output capacity 1,500 pF. max. A single pole flip-position switch is provided which can be used for switching in parallel capacities when required.

Recommended input capacitor: Eddystone Type 817. Recommended output capacitor: Standard miniature 3-gang BC condenser which is suitable in this position up to 1 kw.

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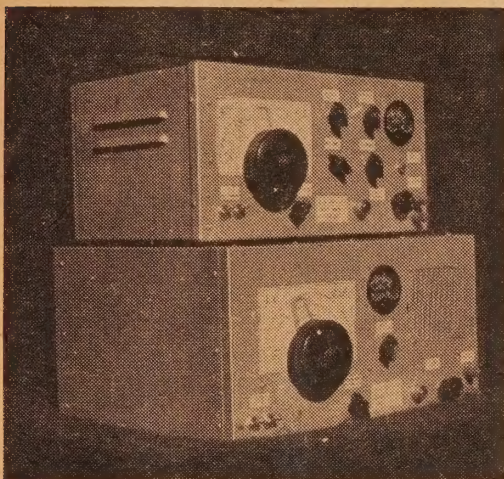
SYNCHRONOUS COMMUNICATION

PART THREE

M. R. HASKARD,* VK5ZBH

(iii) PRACTICAL HINTS IN BUILDING A SYNCHRONOUS COMMUNICATION SYSTEM

A synchronous communication system was designed and constructed, operating on a frequency of 96 Mc. (see photograph). The receiver was direct conversion and had a pull in range of ± 850 cycles, while it would follow a signal drift of ± 2.1 kc./sec. The receiver would remain locked onto a signal until the noise or interference level had increased to a point where the noise power equalled the power in one sideband of the received signal.



96 Mc. Synchronous Communication System.
Top: D.s.b.s.c. Transmitter.
Bottom: D.s.b.s.c. Receiver.

The following are several suggestions which could be borne in mind by a person constructing a d.s.b.s.c. system.

* 3 Te Anau Ave., Prospect, South Aus.

(1) The Transmitter

This is relatively simple to design and construct. The only circuit which may be of interest is the clipping stage shown in Fig. 13.

An idea of the amount of audio power required to fully modulate a transmitter may be acquired from the example that 8 watts were required for a kilowatt transmitter.

Comments on the design of the audio system (its frequency response) and the final modulated amplifiers have been given in the previous sections.

(2) The Receiver

I would suggest that a direct conversion receiver should not be used for an all-band receiver. Not only is switching of coils necessary, but the 90° radio frequency phase shift network and perhaps the "slope" of the reactance tube would have to be changed. All this can be extremely difficult. A simple synchronous receiver on about 80 metres in conjunction with crystal controlled converters would be ideal.

In constructing the receiver, special care must be taken to ensure a good solid chassis and that all audio wiring is shielded. This is because a very large percentage of the receiver gain is at audio frequencies and hence audio feedback (electrical or mechanical) can easily occur.

The receiver must be designed from the outset as a servomechanism problem. This ensures correct tracking, stability and sensitivity. As in Fig. 6, each section should be considered as a black box, and when the overall servo loop has been solved, the black boxes should be filled in. The servo is of the first order type (this is why a frequency modulator is used rather than

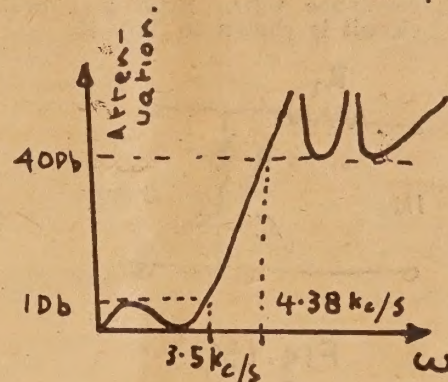
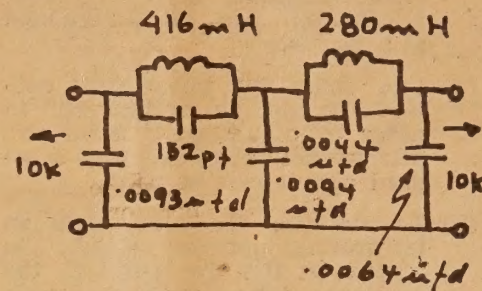
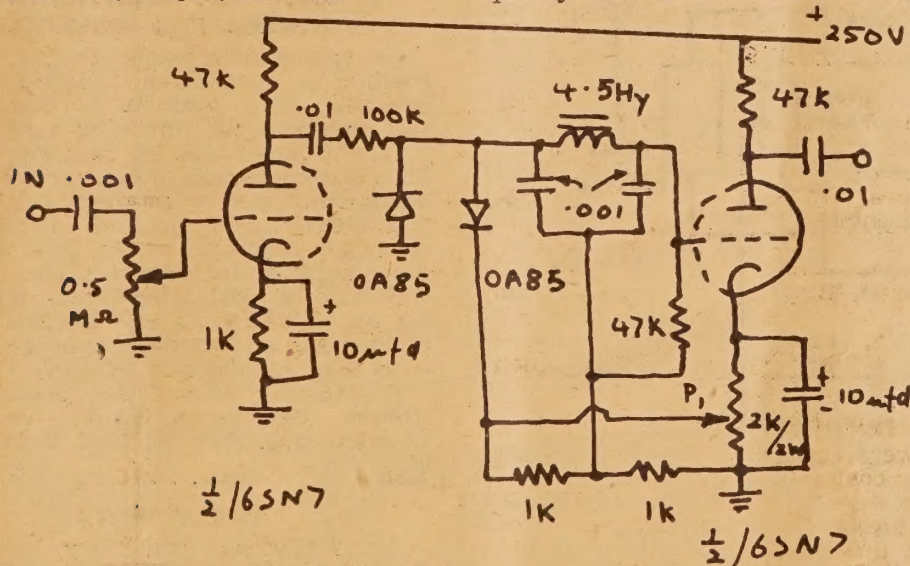


Fig. 14.

a phase modulator) and as such when the receiver is correctly "locked on" there will be zero error in phase (provided the phase is not changing linearly, i.e. no frequency shift).

Special points to note are:

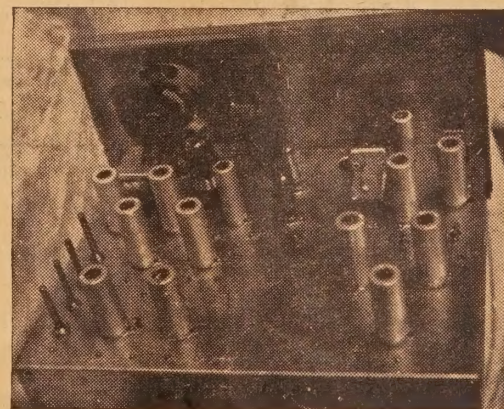
- (1) For low frequencies, the radio frequency 90° phase shift network can be a simple R/C type. For high frequencies, a $\frac{1}{4}$ wavelength of transmission line is suitable.
- (2) The audio amplifier in the I and Q channels should not pass any frequency below about 200 cycles, or heterodyne whistle will be troublesome.
- (3) The low pass filters determine the receiver selectivity curve, and, therefore, special attention should be paid to them. A suitable Tchebycheff circuit is shown in Fig. 14.
- (4) A.g.c. should be used on the audio system.



Note:- P_1 sets clipping Level.

Frequency response 200 ω \rightarrow 2.5kc/s.

Fig. 13.



A 96 Mc. D.s.b.s.c. Receiver
(cover removed).

- (5) A small 1" oscilloscope is far superior to an S meter. If outputs from the I and Q amplifiers are fed onto the X and Y plates, not only can the signal strengths be determined, but the phase error, frequency drift and other information can be determined at a glance.
- (6) The audio 90° phase shift network should be within $\pm 5^\circ$ in order to obtain good noise and interference rejection. Any standard circuit can be used.
- (7) To stabilise the servo loop an integrating network should be placed in the d.c. path to the reactance tube. Such a simple circuit is shown in Fig. 15.

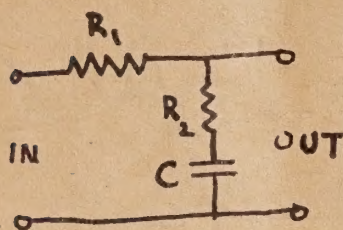
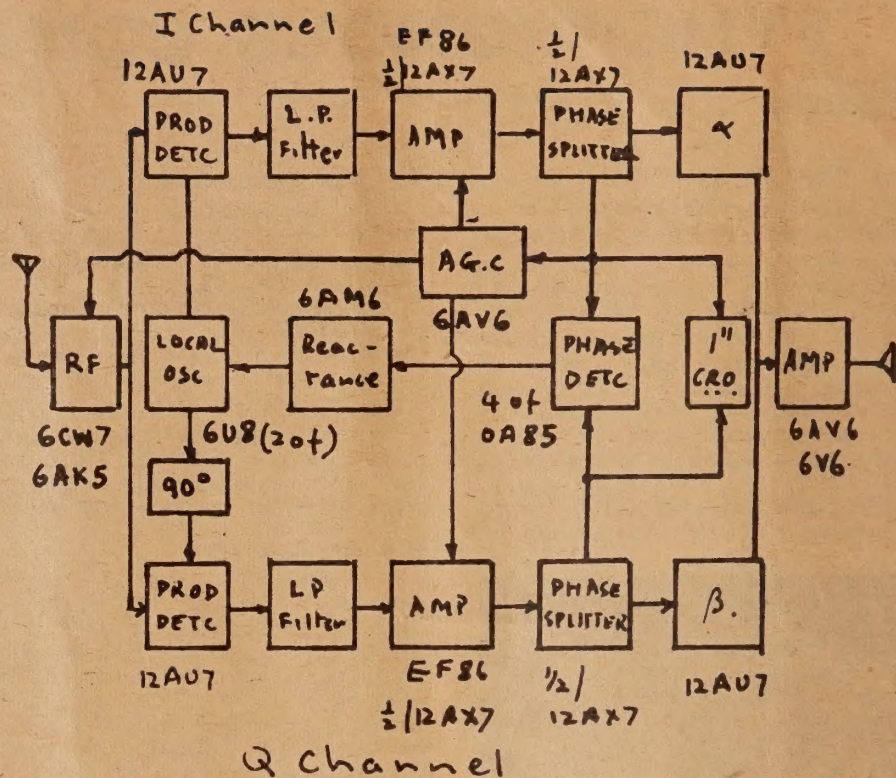


Fig. 15.

Block diagrams of a simple transmitter and receiver are given in Figs. 16 and 17.

Apart from solving the servo loop, a d.s.b.s.c. receiver working on 80 metres is not very difficult to design and construct. I feel that because of the distinct advantages offered by a d.s.b.s.c. system over a present-day a.m. communication system, when building their next transmitter and receiver, Amateurs should give a d.s.b.s.c. system consideration.



Block diagram for the 96 Mc/s Receiver

Fig. 17.

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5. J. P. Costas and R. W. French: "Transmitter Circuits for Suppressed Carrier a.m.," "Electronics," Vol. 30, No. 12, p. 128-131, December 1957.
6. John K. Webb: "A Synchronous Detector Adaptor," "CQ," June 1957.

ELECTRONIC MAINTENANCE ENGINEER FOR HOSPITAL

An opportunity exists for the above position at the Alfred Hospital (Melbourne). The position is permanent and embraces the following subjects:

DC/AC amplifiers up to 1,000 cycles including band-pass filters; carrier wave equipment; power supplies (all fully regulated); galvanometers (light recording); P.E. cell work; pen writing gear; radio active counters, etc.

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TRADE NEWS

An Australian subsidiary company, Collins Radio Company (Australasia) Pty. Ltd., located at Stanhill, St. Kilda Road, Melbourne, Victoria, will serve Collins customers in the Australian, New Zealand and South East Asia area.

A spare parts service centre and complete test facilities employing factory trained technicians for Collins equipment will be maintained by the new company.

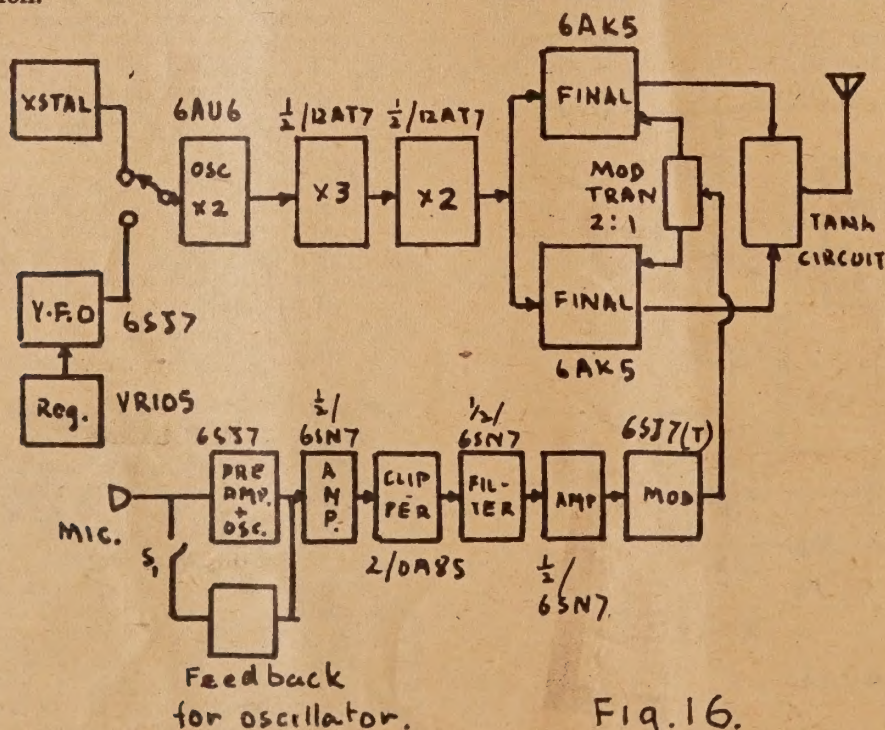


Fig. 16.

Block diagram for the 96 Mc/s Transmitter.

T.V.I. LITERATURE

JOHN ANDERSEN,* VK3ZFO

● The following is a bibliography relating to t.v.i./b.c.i. and is published to assist those who require additional information. The Publications Committee requests all Divisions to advise the problems which their Amateurs are facing in dealing with this matter.

PUBLIC RELATIONS AND CAUSES OF T.V.I.

T.v.i. Causes and Cures—Phil Rand.
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V.h.f. Handbook, Orr and Johnson—pp. 75-89 (includes notes on neutralisation).
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Spurious Radiation Problems—"QST" Jan. '54.
U.h.f. Strip Problems—"QST" Dec. '54.
T.v.i. Causes—"QST" Sept. '52.
V.h.f. Heterodyne T.v.i.—"QST" June '52.
Harmonic Radiation from External Non Linear Sources—"QST" Jan. '53.

ANTENNA COUPLING

Standing Waves and T.v.i.—"QST" Jan. '54.
Home-Built Shielded Link—"QST" Aug. '52.
Stubs for T.v.i. Reduction—"QST" Aug. '52.
Curing T.v.i. with Co-axial Stubs—R.S.G.B. March '58.
Harmonic Reduction With Stubs—"QST" Dec. '48.
More on Signal Shifter T.v.i. Suppression—"QST" March '55.
By-passing for Harmonic Reduction—"QST" April '57.
T.v.i. Tips—"QST" Aug. '49.

LOW PASS FILTERS

Adjusting L.P.F.—"QST" Mar. '55.
Tin-Can Low Pass—"QST" Sept. '54.
Low Pass Filters from Standard Mica Capacitors—"QST" Dec. '52.
Low Cost T.v.i. Filter—"QST" May '50.
Eliminating T.v.i. by Low Pass Filters—"QST" Feb.-April '50.

* Secretary, VK3 T.V.I./B.C.I. Committee, 26 Adeney Avenue, Kew, Victoria.

Half Wave Filters—"QST" Feb. '50.
High Attenuation Filter—"QST" Jan. '50.
Design of L.P.F.—"QST" Dec. '49, Jan. '50.
Half Wave Filter—"QST" Dec. '49.
High Pass Filters—"QST" Aug. '50, Oct. '50, May '49.

SHIELDING

Simple Experimental Shielding—"QST" Dec. '50.
Filtering and Shielding Tips—"QST" Oct. '53.
Shielding for T.v.i. Reduction—"QST" Oct. '50.

TEST DEVICES

Baking Can Wavemeter—"QST" Feb. '55.
Handy Handfull (G.D.O.)—"QST" Mar. '53.
Increasing Sensitivity of G.D.O. Freq. Measurements—"QST" June '53.
Effective T.v.i. Probe—"QST" May '52.
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U.h.f. Converter Harmonic Checker—"QST" July '51.
Harmonic Separators—"QST" Dec. '50.
Regenerative Wavemeter—"QST" Nov. '49.
Useful Tool for T.v.i. Reduction—"QST" July '49.
More on T.v.i. Elimination—"QST" Dec. '48.
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Practical Applications of Pi Networks to T.v.i. Reduction—"QST" Jan. '52.
Sensitive Harmonic Indicators—R.S.G.B. Feb. '52.
Design of Low Pass Filters for T.v.i. Reduction—R.S.G.B. May '53.

T.V.I./B.C.I. Committees have been formed in all W.I.A. Divisions and any W.I.A. member experiencing t.v.i./b.c.i. is particularly requested to inform his local committee of his problems. The above bibliography has been based upon articles which the Amateur has ready access to, but it is not a complete survey. Your Divisional library may be able to lend you any of the above journals.

★

When purchasing any item advertised in "A.R." please state that you read the advertisement in "A.R."

BOOK REVIEWS

RADIO AMATEUR'S HANDBOOK 37th Edition, 1960

This year reviewing the annual edition of this publication was a pleasant rainy day occupation for me and overcame my disappointment at the rain ruining a perfectly good painting day.

It is rightly styled the "Standard Manual of Amateur Radio Communication" and over three million copies have been sold.

Its sections on the theory of radio communications have been revised to keep abreast of the state of the art, and material on the construction of equipment includes new designs in all categories. There are transmitters and receivers for every level of cost and constructional ability.

Special methods of Amateur communication, such as sideband and radio-teletypes, are treated in sufficient detail so that any student of the art will be able to understand the basic principles. The theory and practice of Amateur mobile radio equipment is thoroughly covered and the use of transistors is included wherever applicable.

The chapter on vacuum-tube characteristics has been brought up to date, providing, as usual, one of the most complete listings of characteristics and base diagrams to be found between the covers of any one book.

I was a little disappointed to note that the only power supplies using silicon or germanium rectifiers were described on pages 494 and 495 where it is suggested that "silicon rectifiers may be used in lieu of the selenium types specified". The other reference is in section 6, pages 201 to 205, "A Compact 650 Watt Amplifier" where germanium rectifiers are used in a dual voltage doubling circuit.

Publisher: American Radio Relay League. Australian price 46/3, postage 3/-. Our copies from McGill's Newsagency, 183 Elizabeth Street, and Technical Book & Magazine Co. Pty. Ltd., 295-299 Swanston Street, Melbourne.

"THE TRANSISTOR"

Theory and Applications

This is the latest from the Philips Technical Library. It is well written and describes transistors and transistor circuits in sufficient detail for Amateurs to duplicate the equipment described. Unfortunately it does not include data on Philips' v.h.f. transistor, the OC170.

Our copy from McGill's Authorised Newsagency, 183 Elizabeth St., Melbourne, C.I.

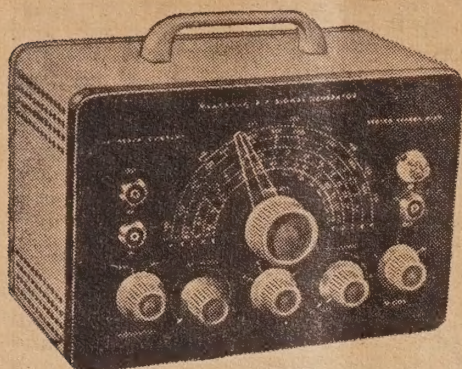
"SHORT WAVE RECEIVERS FOR THE BEGINNER"

Many years ago when I was in my teens, I used to avidly search any literature which became available to me in search of circuits similar to those described in this publication and I can recommend this booklet to our younger constructors. It also contains information on setting up a receiving station, reporting, etc., and should be invaluable to the s.w.l.

The components used in the receivers are of British origin and identical units or acceptable substitutes should be readily available from your usual supplier.

Our copy from Data Publications Ltd., London. Data Book Series No. 14. Technical book suppliers should be able to supply.

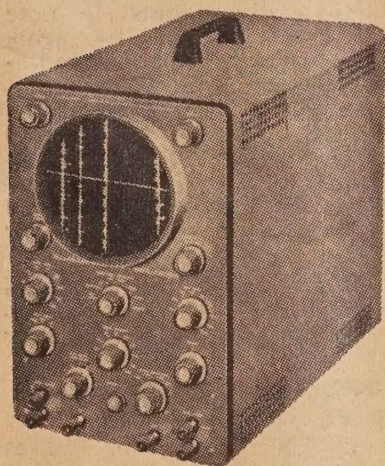
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HEATHKIT O-12 5-inch OSCILLOSCOPE



Horizontal Positioning: D.C. type; permits wide range of positioning to examine any part of trace even with full horizontal gain.

VERTICAL CHANNEL

Sensitivity: 0.025 volts (R.M.S.) per inch at 1 Kc.

Frequency Response: Flat within plus or minus 1 db. from 8 c.p.s. to 2.5 Mc. Flat plus 1.5 to minus 5 db. from 3 c.p.s. to 5 Mc. Response at 3.58 Mc., minus 2.2 db. (All response measurements referred to 1 Kc.)

Rise Time: 0.08 microseconds or less.

Overshoot: 10% or less.

HORIZONTAL CHANNEL

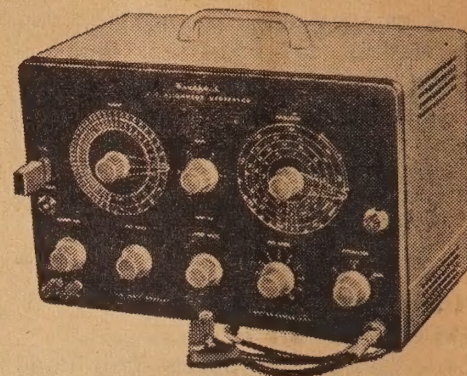
Sensitivity: 0.3 volts (R.M.S.) per inch at 1 Kc.

Frequency Response: Flat within plus or minus 1 db. 1 c.p.s. to 200 Kc. Flat within plus or minus 3 db. 1 c.p.s. to 400 Kc.

Attenuator: Low impedance type in cathode follower output.

Input Characteristics: Selector switch permits use of external input through panel terminal, line-frequency sweep of variable phase or internal sweep from sweep generator.

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TEST EQUIPMENT
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**T.V. ALIGNMENT
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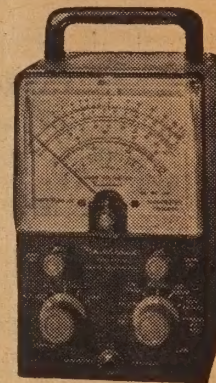
V.T.V.M. KIT

Specifications: D.C. Volts: 7 ranges 0-1.5 to 0-1,500. Input Resistance: 11 megohms. Sensitivity: 7,333,333 ohms per volt on 1.5v. range. Accuracy plus or minus 3% full scale.

A.C. Volts: 7 R.M.S. ranges 0-1.5 to 0-1,500. Frequency response (5v. range): Plus or minus 1 db., 42 c.p.s. to 7.2 Mc. Accuracy plus or minus 5% full scale. Seven peak-to-peak ranges 0-4 to 0-4,000.

Resistance: Seven ranges measures 0.1 ohms to 1,000 megohms with internal battery.

Size: 7% x 4-11/16 x 4% inches.



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Ideal for Servicemen, this handy instrument can be carried on service calls to demonstrate the quality of a customer's picture tube right in his own home. Checks all electromagnetic deflection-type tubes using the duo-decal (12-pin) base. No worry about the type of focusing, electron gun or screen. Test for shorts, leakage and emission capabilities. A separate test is provided for beam current. Test picture right in receiver or carton. No ion tap required. Special provision is made for the actual observation of the gun aperture on the face of the C.R.T. The CC-1 is A.C. power transformer operated and supplies all operating voltages to the cathode ray tube. Designed to last a lifetime—no tubes to burn out or to replace. Permanent test cable with C.R.T. socket and anode connector included. Quality indications are read on a large 4½ inch 3-color meter scale; shorts on a neon leakage indicator. Housed in an attractive luggage-type portable cabinet with removable cover.



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Remembrance Day Contest, 1960

A HANDSOME perpetual trophy is awarded annually for competition between States, inscribed with the names of those who made the supreme sacrifice, and so perpetuating their memory throughout Amateur Radio in Australia.

The name of the winning Division each year is also inscribed on the trophy. In addition, the winning Division will receive a suitably inscribed framed photograph of the trophy.

Objects

Amateurs in each Call Area (this includes those in Australian Mandated Territories and Australian Antarctica) will endeavour to contact Amateurs in all other Call Areas (VK1 and VK2 are considered to be one Call Area).

Date of Contest

13th and 14th August, 1960.

Duration

From 1800 hours E.A.S.T., 13th August, 1960, to 1759 hours E.A.S.T. on 14th August, 1960. A period of 15 minutes silence will be observed by all stations on the 13th August immediately prior to the start of the Contest when an appropriate broadcast will be made from VK3WIA and relayed by the Divisional Stations.

RULES

1. There shall be four sections to the Contest:

- Transmitting Phone.
- Transmitting CW.
- Transmitting Open.
- Receiving Open.

2. All Australian Amateurs may enter the Contest whether their stations are fixed, portable or mobile, but only members of the W.I.A. are eligible for the Awards. Portable/mobile operation is defined as transmitting and/or receiving equipment which is not connected to any private or public power mains or plant.

3. All Amateur frequency bands may be used, but no cross-band operation is permitted.

4. Amateurs may operate on both phone and c.w. during the Contest (e.g. phone to phone, c.w. to c.w., or phone to c.w. and vice versa), but may submit an entry for only one of the above sections listed in Rule 1.

An Open log will be one in which points are claimed for both phone and c.w. transmissoins.

A contestant transmitting on phone but receiving on c.w. must enter for the phone section (and vice versa). Refer to Rule 11 concerning entry in logs.

• The Federal Contest Committee of the Wireless Institute of Australia wishes all Australian Amateurs and Short Wave Listeners to participate in the Annual Contest which is held to perpetuate the memory of those Australian Amateurs who gave their lives for their country during World War II. It is held on the week-end nearest to 15th August, the date on which hostilities ceased in the S.W.P.A.

5. Only one contact per station per band is allowed and arranging schedules for contacts on other bands is not permitted.

6. Only one licensed Amateur is permitted to operate any one station under the owner's call sign. Should two or more operate any particular station, each will be considered a contestant and must submit a separate log under his own call sign.

Contestants operating stations other than their own shall be referred to, for the purpose of these rules, as "substitute operators". Their operating procedure will be as follows:

Phone contacts: Substitute operators will call "CQ Remembrance Day" followed by the call sign of the station they are operating and the word "log" followed by their own call sign.

C.w. contacts: Substitute operators will call "CQ RD de" followed by the group call sign comprising the call sign of the station they are operating, an oblique stroke, and their own call sign.

Contestants receiving signals from a substitute operator will qualify for points by recording the call sign of the substitute operator only.

7. Entrants must operate within the terms of their licences.

8. **Cyphers:** Before points may be claimed for a contact, serial numbers must be exchanged and acknowledged. The serial number of five or six figures will be made up of the RS (telephony) or RST (c.w.) reports plus three figures which may begin with any number between, or including, 001 and 100 for the first contact and which will increase in value by one for each successive contact, e.g. if the number chosen for the first contact is 053, then for the second contact the number must be 054, for the third 055 and so on. If any contestant reaches 999, he will start again with 001.

9. Entries must be set out as shown in the example, using only one side of the paper. Entries must be postmarked

not later than 4th September, 1960, and addressed to the Federal Contest Committee, W.I.A., Box 851J, G.P.O., Hobart, Tasmania.

10. Scoring will be based on the table shown:

SCORING TABLE

		To								
From		VK0	VK1-2	VK3	VK4	VK5	VK6	VK7	VK8	VK9
		VK0	VK1-2	VK3	VK4	VK5	VK6	VK7	VK8	VK9
	VK0	-	6	6	6	6	6	6	6	6
	VK1-2	6	-	1	2	3	5	4	6	6
	VK3	6	1	-	3	2	5	4	6	6
	VK4	6	1	2	-	3	6	5	4	6
	VK5	6	2	1	3	-	5	4	6	6
	VK6	6	1	2	4	3	-	5	6	6
	VK7	6	2	1	4	3	5	-	6	6
	VK8	6	1	2	3	4	5	6	-	6
	VK9	6	1	2	3	4	5	6	-	6

Note.—Read table from left to right for points for the various call areas.

In addition a bonus of 25 points may be claimed for the first contact in each Call Area on 50 Mc. or above.

11. **Logs:** All logs shall be set out as in the example shown and in addition will carry a front sheet showing the following information:

Name.....Section.....

Address.....Call Sign.....

Claimed Score.....

Declaration: I hereby certify that I have operated in accordance with the rules and spirit of the Contest.

Signed.....

Date.....

All contacts made during the Contest must be shown in the log submitted (see Rule 4).

Entrants in the open section must show phone and c.w. contacts in one numerical sequence.

12. The right is reserved to disqualify any entrant who, during the Contest, has not observed the regulations or who has consistently departed from the accepted code of operating ethics.

13. The ruling of the Federal Contest Committee of the W.I.A. will be final. No dispute will be entered into.

14. **Awards:** Certificates will be awarded to the winners of the phone, c.w., open and receiving sections in each area (Northern Territory will count as a separate Call Area). There will be no outright winner for Australia. Further Certificates may be awarded at the discretion of the Contest Committee.

The State to which the Perpetual Trophy will be awarded shall be determined in the following way:

(Continued on Page 15)

EXAMPLE OF TRANSMITTING LOG

Date/Time E.A.S.T.	Band	Emission	Call Sign	RST/NR. Sent	RST/NR. Rcvd.	V.h.f. Bonus	Points Claim.	Blank

Note.—Standard W.I.A. Log Sheets can be used to follow the above form.

EXAMPLE OF RECEIVING LOG—VICTORIAN S.W.L.

Date/Time E.A.S.T.	Band	Call Sign Heard	RST/NR. Sent	Station Called	V.h.f. Bonus	Points Claim.	Blank
Aug. '60							
13 1802	7 Mc.	VK5XU	59001	VK3XU	—	2	
13 1805	"	VK6RU	56004	VK9DB	—	5	
14 1115	50 "	VK4RZ	47135	VK5QR	25	3	

Note.—Standard W.I.A. Log Sheets can be used to follow the above form.

AMATEUR CALL SIGNS

FOR MONTH OF FEBRUARY, 1960

NEW CALL SIGNS

VK— New South Wales
 2CK—G. A. Warner, O.T.C., Bringelly.
 2CO—C. H. Orr, 24 Noble St., Hurstville.
 2CR—D. F. Lloyd, O.T.C. Bringelly.
 2CY—R. B. Chorley, 136 Atchinson St., Crows Nest.
 2HR—M. W. Beck, O.T.C. Bringelly.
 2PK—H. T. J. Stone, O.T.C. Bringelly.
 2DS—S. E. Handcock, 16 Tedman Pde., Silvanina.
 2ZPC—P. J. Carter, 12 Watts St., Ryde.
Victoria
 3EI—D. F. Reid, 355 O'Heas Rd., Pascoe Vale.
 3LL—K. V. Brayshaw, 99 Broughton Rd., Mt. Waverley.
 3AFQ—H. L. Hepburn, 601 Nepean Highway, East Brighton.
 3AMH—W. E. Sadler, Station: Walker St., Ballarat; Postal: 208 Eyre St., Ballarat.
 3ARZ—W. E. Roper, Lot 59 Orchard St., Mt. Waverley.
 3ZAZ—R. N. Magg, C/o. Radio Australia, Shepparton.
 3ZCA—R. G. Abbey, 207 South Rd., Brighton.
 3ZCQ—R. A. Thatcher, "No-Ray-Al," 55 Sandell's Road, Tecoma.
 3ZIR—I. A. Bourke, 2 Crowther Place, Brighton.
 3ZJH—D. W. Dorsey, Cottage No. 6, Radio Australia, Shepparton.
 3ZJJ—D. C. Smith, 12 Inkerman St., Maidstone.

Queensland
 4ZDM—D. W. McGrath, Station: 26 Latchford St., Pimlico, Townsville; Postal: C/o. P.O. Box 205, Townsville.

South Australia
 5TA—G. Cole, 8 Farrell St., Glenelg.
 5ZAY—G. P. Yelland, 19 Lynington St., Tumore.
 5ZDK—R. R. Lamacraft, 38 Avenue Rd., Highgate.
 5ZFK—F. A. Foale, Hillside Rd., Springfield.

Western Australia
 6AO—A. R. Jarman, Forrest, W.A.
 6JR—J. R. Wood, 1031 Wellington St., Perth.
 6MW—M. T. Webster, 139 Wellington St., Mosman Park.
 6TC—C. T. Power, Lot 42, George Rd., Geraldton.
 6ZCH—P. J. McMullen, Albany Highway, Mad-dington.

Tasmania
 7ZRJ—R. H. Waldon, 11 Mayne St., Invermay, Launceston.

Territories
 9HC—J. H. Collister, Cable Station, Cocos Isld.

CHANGES OF ADDRESS

VK— New South Wales
 2YJ—C. W. Johnson, 30 Hicks St., Merewether.
 2AAU—K. P. A. Persson, 96a Station St., Arncliffe.
 2ABM—R. G. Morgan, 98 Northcote Rd., Bankstown.
 2AEF—A. G. Oswald, 39 Allawah Ave., Carss Park.
 2AEV—A. McMurray, 241 North Rocks Rd., North Rocks.
 2AFD—D. J. Fisher, Kapooka Ave., Dapto.
 2AGP—E. A. Parker, 79 Perouse Rd., Randwick.
 2ALC—C. Allen, Eastern Command Signals, Gomley St., Lidcombe.
 2ALP—J. P. Franklin, 30 Fitzroy St., Umina.
 2ALW—H. J. Weatherley, Lot 4, Villiers Rd., Padstow Heights.
 2AVJ/T—W. B. Jones, 231 Albany St., Gosford.
 2AVK—S. F. G. Williams, 147 Katoomba St., Katoomba.
 2AWW—G. D. Wheaton, 35 Sixth Ave., Con-dell Park.
 2ZGR—G. Ronayne, 117 Ryde Rd., Hunters Hill.
 2ZJN—R. J. Neurath, 51 Doyle St., Revesby.

Victoria
 3JT—J. L. G. Symons, 60 Maple St., Mt. Waverley.
 3OK—J. Craddy, 22 Lyell St., South Melbourne.
 3PV—D. B. Shaw, Station: 29 Narong Rd., Caulfield North; Postal: C/o. O.T.C. Receiving Station, Rockbank.
 3QG—C. K. Blake, 39 Urquhart St., Horsham.
 3VS—I. L. Griffin, 27 Auburn Rd., Auburn.
 3AER—A. Parker, 30 Gillies St., Fairfield.
 3AKA—K. H. Hughes, Sunhill Rd., Mt. Waverley.
 3APV—D. B. Shaw, C/o. O.T.C. Receiving Station, Rockbank.
 3ZJE—J. R. Edwards, 52 Orrong Rd., Elsternwick.

Queensland

4CI—C. E. Cogzell, 38 Bernhard St., Padding-ton, Brisbane.
 4JA—J. T. Marston, 187 Aberdeen Pde., Boon-dall.
 4XS—L. J. Salter, 66 Haly St., Kingaroy.

South Australia

5DJ—J. F. Drew, Kingston, S.E.
 5FE—F. Ward, P.M.G. S/Techs. Res., Marree.
 5IA—A. R. Allwright, 2 Shaxton St., Salisbury North.
 5IW—I. B. Wall, 8 Dutton St., Glen Osmond.
 5PK—P. T. Hainsworth, Manunda Ave., Wind-sor Gardens.
 5RZ—O. L. Nestrom, 7 Daphne St., Kurralka Park.

Western Australia

6ZCE—K. J. Kosina, 4 Walker St., Wembley.

Tasmania

7JO—J. G. Oliver, 83 Montagu St., Newtown.

CANCELLED CALL SIGNS

VK— New South Wales
 2DS—A. D. Freeman.
 2EM—A. F. Sutton.
 2AAZ—18th L.A.A. Regt. Radio Club.
 2ACO—C. H. Orr (now VK2CO).
 2AHL—W. A. Lewis.
 2AHW—H. T. J. Stone (now VK2PK).
 2ANY—M. W. Beck (now VK2HR).

2AOQ—D. F. Lloyd (now VK2CR).
 2AVG—E. G. V. Gabriel.
 2AVO—J. T. Crichton.
 2AVW—G. A. Warner (now VK2CK).
 2AXB—E. Carruthers.
 2AXS—R. R. Smith.
 2AYE—D. E. Evans.

Victoria

3WT—W. G. Barratt.
 3AJX—A. R. Jarman (now VK6AO).
 3AYO—M. T. Webster (now VK6MW).

Queensland

4DS—D. R. Sneddon, Willis Island.

South Australia

5CR—W. F. Couper.
 5DG—D. P. Gyles.
 5LW—R. D. Kelly.
 5ZEF—I. B. Fraser.

Western Australia

6DL—D. Laws.

Tasmania

7PD—P. E. L. Dunne.

PERMITS GRANTED FOR TELEVISION EXPERIMENTS

VK—
 2AJT—F. G. Clissold, Box 230, Deniliquin.
 2ZEF/T—R. J. Flynn, Experiment Farm, Yanco.
 4VB/T—J. F. Wood, 175 Ferguson Rd., Seven Hills.
 6ZBK/T—L. G. Rock, 36 Essex St., Wembley.



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VK5DF AT FAIR

Amateur Radio Station VK5DF was set up at the Port Lincoln Trades and Industries Fair, held on 25th and 26th March, 1960.

John-VK5JM and Wally VK5DF were the operators on the 7 and 14 Mc. bands. The photograph shows Wally VK5DF at the controls.

Radio conditions were not the best during the hours of operating, but 30 most interesting contacts were made and greatly appreciated by the patrons to the Fair. Quite a few took the opportunity of having a few words to say to fellow Amateurs, both near and distant. The best DX was to ZL land.

The transmitter was a Geloso v.f.o. into a single 807 at 50 watts plate and screen modulated. The receiver was home built, 10 tubes, one r.f. stage, three i.f. stages at 455 Kc., and plug-in coils for the various bands.

The complete rig was set up in a home-built walnut veneer cabinet and has the permission of 5DF's XYL to allow it set up in the front room of the house.



The antenna used at the Fair was 68 feet long, 25 feet high, and end fed with 300 ohm ribbon 45 feet long.

The DX cards pinned around the world map were loaned by Tubby VK5NO, and came from 70 different countries. John VK5JM loaned a spare receiver and the globe of the world.

The Port Lincoln Junior Chamber of Commerce is grateful to the P.M.G. Radio Branch for the special permission to operate the station at the Trades and Industries Fair as a working station, and sincere thanks to the Amateurs who made contact. By the time that this is read it is hoped that the special QSL cards printed for the occasion will have been posted out to all those stations that made contacts.

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ROSS HULL MEMORIAL V.H.F. CONTEST 1959-60 RESULTS

TROPHY WINNER

D. R. Horgan, VK4ZAX, was the trophy winner and highest scorer with 1,885 points.

AWARD WINNERS

Phone:

VK2ABR—A. W. Rushby	707
VK3ZFM—R. A. H. Blake	628
VK4ZAX—D. R. Horgan	1885
VK5ZGA—G. A. Gormly	1052
VK6WG—W. W. Green	505
VK7ZAI—D. A. H. Thorne	307
JA1BWD—Takashi Miyazaki	474
JA2ZL—Yasusi Yamada	142
JA3ASP—Shuichi Matsumoto	101
JA8CC—Ken-ichi Kitajima	227

Open:

VK2WH—W. H. R. Stitt	951
VK4PU—J. D. Purdon	691
VK6BE—J. R. Elms	804
VK7LZ—C. P. Wright	764
VK9XK—S. R. Coleston	593
ZL2DS—K. R. Kirkcaldie	205

Receiving:

D. King (VK4)	1672
K. A. Wehr (VK5)	1204
J. M. Hilliard (VK3)	481
Jasutsugu Miura (JA)	415

INDIVIDUAL SCORES

Phone:

VK2ABR	707	VK5ZDR	654
VK2HE	650	VK5ZBL	653
VK2RX	553	VK6WG	505
VK2ZER	542	VK6ZBP	490
VK2ZCF	341	VK6ZBZ	446
VK2ZDM	237	VK6FM	293
VK2ZAD	125	VK6ZCD	267
VK3ZFM	628	VK7ZAI	307
VK3ZCG	574	VK7ZAO	198
VK3ZCZ	441	VK7ZAC	136
VK3ZFO	294	VK7ZAA	76
VK3ZGP	252	VK7ZAK	47
VK3ZAT	240	JA1BWD	474
VK3ZBR	142	JA1CYC	396
VK3QV	100	JA1AUD	329
VK3ZCO	84	JA1CYZ	266
VK4ZAX	1885	JA1BIR	211
VK4NG	1011	JA1BYM	168
VK4ZBE	889	JA1CWP	139
VK4ZBI	506	JA1CBZ	95
VK4RW	302	JA2ZL	142
VK5ZGA	1052	JA3ASP	101
VK5ZBZ	802	JA8CC	227
VK5KK	772		

VK5ZBH sent in a check log.

Open:

Participants as shown in Open Awards.

Receiving:

Participants as shown in Receiving Awards plus C. H. Thorpe (VK4) 422 points.

AUSTRALIAN AMATEUR CALL BOOK

The 1960-61 Edition will be issued during June-July and orders will be accepted in advance. Check your Call Sign listing and advise the Publications Committee of any correction required. Use the tear-sheet at the back of the Call Book.

FEEDBACK

The extraordinary meeting of Federal Council concluded at 6.30 p.m. on 16th April, 1960, having spent all day discussing the implication of I.T.U. with reference to VK Amateurs. The results of this meeting will have a far reaching effect, and only history will prove if the correct approach was adopted.

Like yourself, I had little knowledge of how Federal Council and Federal Executive functioned, but having spent the day at this meeting, have now gained some impressions which may interest you.

Federal Council is no social gathering, neither is it a group of yes men. Each Councillor had his say and forthrightly put forward the views of his Division. If these views were not adopted it only indicated that the majority of Councillors did not concur.

This meeting, specially called to discuss frequency allocations, did just that. **They fully discussed every Amateur Band and you may be assured that your favourite band was the subject of as much debate as any other band.** No bias was shown and the Councillors proved that they did have **your** interests in mind.

You may not have yet heard that Federal Council agreed to Federal Executive taking the strongest possible action to retain the maximum Amateur frequency allocation. Many other details were agreed upon, and you should be fully informed. If you do not know the full details, ask questions of your Federal Councillor, Division, or on the W.I.A. call-back.

Radio Amateurs are indeed fortunate that they have access to a rapid communication medium—Amateur Radio. Let us use this to the fullest extent so that every Australian Amateur is aware of the outcome of the Extraordinary Federal Council Meeting.

Rumour has no part in our activities, particularly as the true facts are so readily available. Therefore base your comments upon official facts and ignore grapevine reports.

Back your Division, which has agreed to a standard Australian Amateur policy regarding retention of our Amateur bands. Act as a united W.I.A. to retain frequency allocations, because as an individual you will only help to weaken Federal policy.

Every Australian Amateur is to receive a copy of the full I.T.U. report regarding frequency allocations. This will be the same report as that tabled at the Federal meeting, so you, too, will then possess all the relevant facts.

★
Heard an interesting character calling CQ ninety-three times without giving his call sign. Bet he complained that no one ever answers him. What's the matter OM? Even pirates give call signs.

★
That character must read this column. He now hetrodynes VK3WI.

★
Read that Mt. Bunninyong may be used for erection of t.v. towers. My, that will ruin the DX won't it.

73,
CASEY.

TYPE 65

General purpose with low frequency response suitable for lively halls.

TYPE 66

P.A. use where less low frequencies are required than the 65 with a lift in the middle frequency to ensure high output without feedback.

TYPE 67

Communication use, has a further reduction in low frequencies than the 66 and increase in high frequencies for intelligibility through noise.

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„ 66 MA	£11/3/6
„ 66 MD	£9/3/0
„ 67 MA	£11/3/6
„ 67 MD	£9/3/0

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Primary: 200, 220, 230, 240 volts.
Secondary: 1,000, 850, 750, 600, 500 volts per side of c.t., 300-400 mA. choke input filter.

TYPE PT1870

Primary: 230 or 240 volts to high, medium, or low taps. (Overwound primary.) Suitable for switching with non-shorting contacts.

Secondary 1: 850, 750 or 600 volts per side of c.t., depending on primary tap selected. D.C. load current 200 mA. continuous or 250 mA. part intermittent with choke input filter.

Secondary 2: 4.5 to 6 volts at 0.3 amp. for pilot lamp. For use with 5R4GY rectifier, choke input filter.

TYPE PT1400

Primary: 200, 220, 230, 240 volts.
Secondary: 565, 500, 425 volts per side of c.t., 250 mA. condenser input filter.
Filaments: 2 x 6.3v. (3a.), 2 x 2.5v. (3a.), 5v. (3a). Horizontal mounting.

TYPE PT1305

Primary: 200, 220, 230, 240 volts.
Secondary: 2.5v. c.t. 10a. for 2 x 866/A fls. Max.: D.C. wkg. 3,000 volts.

TYPE PT1516

5v. at 3a., 1,000v. D.C. working. For use with h.t. power supply and high level negative peak clipper filament voltage.

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HINTS AND KINKS

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Don't discard those old burned-out potentiometers. Throw away the carbon element and case but save the shaft and threaded bushing. It can be used as panel feedthrough bushing for $\frac{1}{4}$ inch shafts.

—Ira L. Simpson, W3LKS, "QST," Dec. '59.

MODULATION PERCENTAGE INDICATORS

The circuit of a modulation indicator that I use with my 813 rig is shown in Fig. 3. It indicates by the use of neon lamps when the modulation exceeds 89 and 100 per cent, and is superior to a meter indicator since the flashing lamps can be seen at a glance without looking directly at the indicator. The audio gain controls on the speech amplifier-modulator are set so that the 89 per cent. indicator flashes only occasionally. The indicators are NE51 neon lamps.

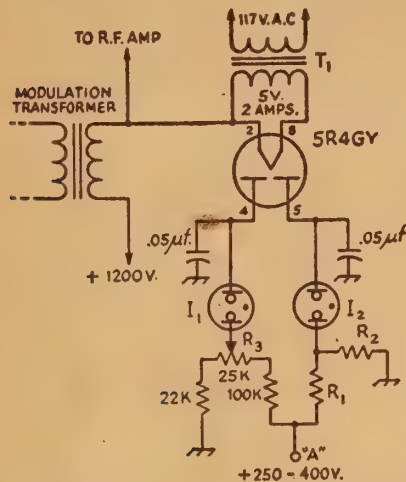


Fig. 3.—Diagram of WIIOW's modulation indicator. Transformer T1 should have high-voltage insulation.

Variable resistor R3 is adjusted, with the r.f. amplifier plate voltage turned off, until indicator I1 ignites from the voltage source at "A". In actual on-the-air use, the r.f. amplifier plate voltage will swing to zero on negative peaks during 100 per cent. modulation and the lamp will ignite. Indicator I2 is biased to about 200 volts by choice of the proper values for the voltage divider R1-R2. I used two 47,000 ohm 2 watt resistors with 400 volts at point "A". The ignition voltage for the NE51 is around 65 volts. When the r.f. amplifier voltage is less than 135 volts (200 — 65) the indicator will ignite.

The formula for calculating per cent. modulations is

$$\% \text{ mod.} = \frac{E_s - (E_b - E_1)}{E_s} \times 100$$

where E_s is the r.f. amplifier d.c. plate voltage, E_b is the neon lamp bias voltage and E_l is the neon lamp ignition voltage. Substitution in the formula for indicator I2 in Fig. 3:

$$\frac{1200 - (200 - 65)}{1200} \times 100 = 89\%.$$

The 5R4GY rectifier can be used in circuits where the plate voltage does not exceed about 1400 volts d.c. For higher voltages a 2X2A can be substituted (along with a suitable filament transformer).

—Charles R. Greene, W1IOW, "QST," Oct. '59.

The modulation-monitor circuit shown in Fig. 4 does away with the necessity for using a separate filament transformer or a filament winding with high voltage insulation, and can be used at Class C plate voltage levels as high as 10,000 volts d.c.

The monitor uses a diode designed for television receiver power supplies, and will work with any a.m. transmitter in which the Class C plate current is 125 mA. or more. The diode direct-emitting filament nominally requires 200 mA. at 1.25 volts, but the tube is connected as shown, the power dissipated is only about $\frac{1}{4}$ watt. Therefore, heat generation is not a problem and the tube may be mounted in any convenient spot.

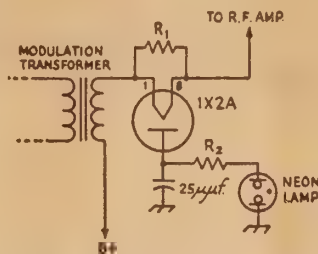


Fig. 4.—Diagram of W2GOO's modulation indicator which obtains filament power from the r.f. amplifier plate supply.

Resistor R1 should be included in the circuit if the d.c. plate current of the r.f. amplifier exceeds 250 mA. The resistor's value may be calculated by using Ohm's law. Substitute 1.25 volts for E, and the excess current over 200 mA. for I in the formula.

Resistor R2 is a current limiting resistor which protects the rectifier. Its value depends on the type of rectifier and neon bulb used, but something around 100,000 ohms should be about right.

More than one rectifier may be used by connecting the filaments in series. Again, if the Class C plate current exceeds 200 mA, connect resistors in parallel with each filament.

—E. A. Anthony, W2GOO, "QST," Oct. '59.

BACK-LASH IN H.R.O. TUNING CONDENSERS

If the dial on your HRO does not return to the same setting each time it is moved then the solution is as follows: Carefully unscrew the nut at one end of the tuning condenser, then slowly tighten the inner screw. Repeat this process at the other end of the condenser, then tighten both holding nuts. This will remove all back-lash in the dial.

May "A.R." correspondence reveals a lot regarding our "doctors", but was disappointed not to read the following story. When a prominent actress fainted, the stage manager appealed for a doctor, regrettably the physician was last in a long line of D.Sc., D.D., D.Lit. Suppose this led to a bust up.

On the air checks prove that double sideband with injected carrier is still the most popular mode of transmission.

A WORD TO THE WISE

Throughout Australia all electricity authorities have adopted the standard colour code of green for the earth, with red and black for the active and neutral respectively in all leads to a.c. mains equipment.

Overseas manufacturers do not use this colour code; in their system **red is earth**.

Before connecting any imported equipment to the a.c. mains, check with an ohmmeter to establish which lead is earth and wire the apparatus accordingly to the mains plug. Do not take for granted the fact that the equipment is correctly (i.e. safely) wired. Check before using.

In addition it is always a safe precaution to check any three-pin power point. Some States do not require the earth lead to be connected to every three-pin socket in a domestic installation. So though your apparatus may be properly connected to the three-pin plug, your power point may not be properly earthed.

Check your installation to ensure all equipment is correctly connected and adequately earthed.

DEATH IS PERMANENT!!

ALL ASIAN DX CONTEST

The Japan Amateur Radio League is conducting an All Asian DX Contest for 30 hours from 1000 GMT 27th August to 1600 GMT 28th August. The purpose of the Contest is "to promote the radio activities of Amateurs in Asia through more closely related communications between the Radio Amateurs and those of other continents". The rules are:—

1. Stations participating should call CQ AA.
2. All bands 3.5 Mc. to 28 Mc. inclusive may be utilized.
3. The Contest is for c.w. only and cross-band operation is not permitted.
4. The serial number exchanged will be the RST report plus the age of the operator; YL operators are permitted to use two zeros in lieu of giving their age (hi).
5. Each contact will score one point and the multiplier is the number of Asian countries worked on each band.
6. Awards of certificates will be made to each country. (a) For single band entry to highest scoring station on each band. (b) For multiband entry, the three highest scoring stations.

In addition a special cup donated by the Minister of Postal Service will be awarded to the highest scoring single operator on multi-band in each continent. Logs must be post-marked not later than 30th September, 1960, and should be sent direct to J.A.R.L., P.O. Box 377, Tokyo Central, Japan, and should be endorsed Attention Contest Committee. The usual certificate should be completed at the end of the log.

Further details may be obtained from the
W.I.A. Federal QSL Bureau.

Building a modulator? Suggest that if you require a driver transformer for a 6N7, then you contact A. & R. Electronic Equipment Co. Pty. Ltd. who have just released their Type IT630. Having spent a long time searching the "recognised" trade houses I assure you they are not easy to locate.

Want to work an AC5? It is difficult as there is one licensed station in that territory. The same applies to CR10, CS3, KG6I, KP6, PX, TA, VP8, VQ8, VR1, XV, YI, ZD3, ZD8, 4V8, and 8J. Think of the dog pile when these stations call CQ.

CORRESPONDENCE

Any opinion expressed under this heading is the individual opinion of the writer and does not necessarily coincide with that of the publishers.

JOHN MOYLE MEMORIAL STATION

Editor "A.R.," Dear Sir,

Suggestions have been requested for the form which a memorial should take to perpetuate the memory and work of the late John Moyle.

Able panegyrists have made it possible for many of us who did not know John personally to learn of his tenacity of purpose in working to improve the standard and status of Amateur Radio. His efforts on behalf of the Wireless Institute of Australia are known to all members and it appears to be generally agreed that the W.I.A. should claim the privilege of sponsoring a memorial.

When the final form is decided, it should preserve the dignity of the man remembered and to achieve this, it is considered all contests should be avoided.

To endow a scholarship in radio engineering would be a fine and lasting tribute if it could be financed, but the best memorial to John would be to perpetuate something which he created and through which he was known to Amateurs all over the world.

It would be a nice gesture to approach Mrs. Moyle to seek her agreement for the W.I.A. to obtain permission to control and operate VK2JU as the "John Moyle Memorial Station". The New South Wales Division is admirably situated to install and operate such a station.

What better way to perpetuate the memory of a great Amateur?

—George Bills-Thompson, VK3AHN.

THE AMATEUR'S STRUGGLE

Editor "A.R.," Dear Sir,

Recent statements in Parliament, touching on the Amateur's struggle to defend his right to use the existing bands, must cause all Amateurs to do some deep thinking on this urgent matter.

When Mr. Daly, M.H.R. (16/3/60), in the House challenged the P.M.G. (Mr. Davidson) to give a satisfactory answer to these questions, "Who were the delegates to the (Geneva) Conference? What instructions were given to them? Did they act contrary to those instructions? . . .," the statement made by Mr. Davidson was no answer at all! He obviously intends to hide the glaring and disturbing fact that in spite of widespread support of Allan Fairhall's statements in the House in May last year (no Member of the House supported cuts in the bands), yet our delegates urged cuts at the Conference and almost certainly these will be recommended in the forthcoming Report to the House.

To quote Mr. Bryant (Wills) (Hansard, page 316), "This Government's indirect direction of Public Servants to act on behalf of the Nation has got to cease".

Yet as Mr. Bryant must know, this has been evident for a long time now. Parliament is a farce so long as it continues.

It is not enough in my opinion that the Federal Executive alone advocates the slogan "Use the bands or lose them". We can and must bring political pressure to bear individually and as an organisation.

If we once assume that the Amateur represents a cross-section of the people, then we must by virtue of that assume that just like everyone else he has lost much of his leisure time over the last 10 years or more, through the agency of inflation, and the high cost of living and the necessity to work overtime, etc. In other words he is fighting on at least two fronts—against great odds—to keep his family and yet still retain some leisure time for his hobby.

What one could suggest is a campaign to induce each Amateur to spend a small part of his leisure time to write to his local Member and the local paper, supporting Allan Fairhall's more recent move in the House ("Herald" 5/5/60) to set up a separate body to allocate the bands, apart from other government departments who use radio bands, on similar lines to the F.C.C. in the U.S.A.

This could be an excellent beginning.

—V. H. Richardson, VK3XQ.

CUTS IN AMATEUR BANDS

Editor "A.R.," Dear Sir,

No doubt when this letter appears the members will have read in your magazine the recent speeches in the Federal Parliament of Senator Hannan, Messrs. Fairhall, Wheeler, Turner and Dean referring to prospective cuts in Amateur bands.

Mr. Fairhall has outlined the matter perfectly. The idea that such an important matter should not be brought before our elected representatives is quite wrong. The right to bring grievances before his Member of Parliament is the right of every citizen.

As mentioned in the Editorial column in "QST" for March, it appears from the proceedings at Geneva that in certain countries, Amateurs had been neglecting their homework. The moral of this is clear. From this time forward, in order to do our homework, we have to have good publicity and public relations. Let us constantly keep in touch through the daily press and our local Members. We tend to forget that a Commonwealth Department is the servant of Parliament, and Parliament is elected by us, the citizens.

—R. L. Douglas, VK2ON.

M. E. Collett, VK2RU.

R. Brook, VK2AI.

"PINK PAGES"

Editor "A.R.," Dear Sir,

It is always regrettable when the correspondence columns of a specialist journal are used to expound views on matters in no way connected with its specialty.

In particular I refer to the querulous letter from Mr. J. G. Reed, VK2JR (hereafter referred to as Reed in deference to his objection to the more courteous forms of address, and to all titles, etc.) in which he uses his pink pages suggestion as a vehicle for a mixture of bombast and boorishness.

Let us examine his presumptions and suggestions.

Of what value would a list of names and hobbies be? Let us also include such things as religious denomination, club membership, masonic affiliations, etc., for to many they are more important than particular hobbies. First names, only assume real value when several contacts have established a bond between operators. The traditional "Old Man" is far more suited to chance contacts than the rigmarole "The name here is Cecil—or Cedric—or Joe".

Does the Amateur need to hunt for kindred spirits among the pink pages before he answers a call, or worse still, before he contacts another Amateur a second time? How many of the "active" Amateurs, as Reed calls them, actually look a person up in the Call Book during contact?

Then again, what constitutes an active Amateur; one who commences every contact with "The rig here is . . ." If to be an active experimenter—and not a drone—requires us to bandy clichés with the mental constipation and verbal diarrhoea group, I shall be content to remain a drone.

The Amateur licence permits us to carry out electronic and associate experiments—not social experiments!

Whilst not all medical practitioners may be regarded as God's gift to mankind, it would be as discourteous to deny them the use of the title Doctor as it would be to deny Reed the right to call himself Mister, if he chose, for one is no more regular than the other.

In contrast, however, the title "The Reverend" is indeed regular when applied to "Clerks in Holy Orders" and as such is used in all official documents. To describe this title as a sanctimonious tag is surely in keeping with the spirit of precocious larrikinism evidenced in the book under arm episode. Fortunately, most school "professors" don't carry their precocity into adulthood.

Such a slight on the eleven clergy listed in the Call Book calls for an immediate apology which I and others hope to see in the next issue of "Amateur Radio".

—George Cameron—VK5EC.

Editor "A.R.," Dear Sir,

An excellent suggestion by "Professor" Joe Reed to list the activities of Amateurs in a pink page section.

This would assist in opening up new avenues of conversation during the QSO—with apologies to those technical experts who would have us limit remarks to the subject of radio.

Joe's ideas did not call for the tirade of abuse from the members of the medical profession and its supporters.

Like the "Professor," I fail to see what useful purpose is served by the inclusion of a prefix to denote the calling or profession of an Amateur.

If it is not to drum up a little extra local business, then it surely must be social snobbery.

Which gentlemanly Amateur even cares if the owner of the honey blonde tones at the other end of the QSO is married or not—plain "Mary" would do just as with Tom, Dick or Harry.

"M.D." states that our American brothers would class "Professor" Joe Reed as a peddler

of quack medicines. Might I point out to "M.D." that the prefix Dr. would mean to them either a foot doctor, a tooth doctor, a backbone doctor, or as "M.D." himself prescribes—a pink pill doctor.

Ernie, "The Chinese laundryman," is wrong when he states that the vocation of a minister of religion is not a profession as according to social snobbery the three top professions embrace the Law, the Army, and the Clergy, in that order.

—J. F. Pickles, VK4FP.

[The Publications Committee considers the suggestion regarding a pink page section in the Call Book has not met with favour and therefore closes correspondence on this subject.]

Editor "A.R.," Dear Sir,

Permit me space to reply to the various critics following publication of my letter proposing a special section of the Call Book . . .

Personally, I do not expect that Amateurs will bestir themselves to make an equivalent of the pink pages possible for the Amateur Call Book. Today the experimental urge and spirit of originality seems to have withered beyond recognition . . .

—J. G. Reed, VK2JR.

THIRD PARTY TRAFFIC AND EMERGENCIES

Editor "A.R.," Dear Sir,

One of the points most frequently brought up in favour of Amateur Radio operation is the fact that Amateurs can be useful in providing communications in emergencies. The validity of this is borne out every month in "QST's" column, "With the A.R.E.C."

If the P.M.G. Department recognises this as one of the reasons for our continued existence, it seems a pity that we, as Amateurs, are not given more opportunity to become proficient in message handling. I refer, of course, to third party traffic.

If a group of Amateurs, few or none of whom have ever had the opportunity of handling messages in an organised net, were suddenly to find that they are the only means of communication into and out of an emergency area, the result would probably be a shambles, or at best a most inefficient system.

If, on the other hand, those Amateurs had been able, over a period of time, to develop a smoothly operating system of nets and traffic routing, the result would be much more beneficial to the public, and much less confusing to the Amateurs concerned.

The National Traffic System, which operates throughout the U.S.A. and Canada, is a good example of what can be done by Amateurs. Most nets in the system meet at least five times a week; some meet twice each evening, and a large amount of traffic is handled for Amateurs and for the general public. The result is considerable favourable publicity for the Amateurs, who in turn become proficient in organised traffic handling and enjoy doing it.

I realise that the W.I.C.E.N. organises practices for its members, but this is not enough to develop a good system.

First, nets should meet at least five times a week, and should be integrated into a traffic system covering the whole country.

Second, c.w. is the only efficient mode for handling traffic—but that is another story!

The P.M.G. Department has, I believe, a monopoly on communications in this country. Since that Department issues our licences, can they not grant us third party traffic privileges?

Surely it cannot be that they are afraid of the competition we would give them, because:

- The total number of messages handled by Amateurs would be a negligible part of those handled by the Post Office.
- We would be operating a purely voluntary system, without charge, and could therefore give no definite guarantee of delivery.
- The P.M.G. could restrict our traffic (as is done in Canada) to messages of a non-commercial nature.

The extremely small loss in Post Office revenue due to some messages being handled by Amateurs instead of telephone or mail would be more than offset by the value, in times of emergency, of the communications system that we could build up.

Can we hear some opinions on this, other than those of this ex-VE7 who misses his nightly sessions on the B.C. Emergency, Seventh Regional, and Pacific Area nets?

—Ben Pooley, VK5BP.

T.V.I. AND THE G.D.O.

Editor "A.R.," Dear Sir,

I wish to thank you for the inclusion in May "A.R." of the T.V.I. Diagnosis Chart and to the author of same whom I believe simplified the original article from R.S.G.B. t.v.i.

(Continued on Page 15)

OVERSEAS TRIBUTES TO LATE JOHN MOYLE

The following tributes to the late John Moyle, VK2JU, have been received by the W.I.A. Federal Executive from overseas Amateurs:

Dear Mr. President,

It was with profound regret that I heard the sad news of the passing of John Moyle, VK2JU. I was on the British Delegation in Geneva and got to know John extremely well. He really did a first class job in Geneva and I would like very much to let you know how good an advocate you sent. Without doubt he furthered the Amateur cause. He did not spare himself, was well informed, and made his presence felt with tact, but none-the-less with firmness. Australian Amateurs, and indeed, all Amateurs are indebted to him. To hear of his death you can well understand was quite a shock. I feel we have all lost a sincere friend in Amateur Radio.

I trust you will accept this little note as an appreciation of John and his work.

—L. E. Newnham, G6NZ,
President, 1958, R.S.G.B.

Dear Fellow Amateurs,

Through J. Clarricoats, G6CL, I have just learnt that our good friend, John Moyle, VK2JU, died last month.

I had the good luck to meet him at Geneva and to witness the splendid way in which he assisted the cause of Amateur Radio. His death is certainly a great loss to the fraternity and I have been extremely sorry to hear about it. Please be so kind as to pass my condolences to the relatives of the deceased.

—Otfried Luhrs, ex-DL1KV,
Member I.A.R.U. Delegation.

Dear OM,

It is with great regret that I have to acknowledge receipt of your letter of 16th March, 1960,

reporting the sad news of the death of John Moyle, VK2JU, and the sympathy of the members of our Society in this great loss is extended both to the W.I.A. and through you to his family.

My own personal sympathy is tinged with the great regret that I failed by a few short hours to meet John in Switzerland last year whilst on holidays.

Many thanks to you and to all your officers for the excellent performance in maintaining, if not status quo, then as near to it as could possibly have been achieved in the recent I.T.U. Conference regarding Region III.

—G. A. Cuppleditch,
President, Hong Kong Amateur Radio
Transmitting Society.

MRS. MOYLE'S SINCERE THANKS

The Federal President (Mr. Hull) of the Wireless Institute of Australia received the following letter from Mrs. Moyle:

Dear Mr. Hull,

Would you kindly convey to the Federal Executive and the Federal Council of the Institute my sincere thanks for kind messages and expressions of sympathy in our recent bereavement.

In this time of sadness it has given me much comfort to know of the high esteem in which John's contributions to the W.I.A. are held for, as you must well know, the Amateur cause was always very close to his heart.

(Signed) Alice Moyle.

R.D. CONTEST, 1960, RULES

(Continued from Page 9)

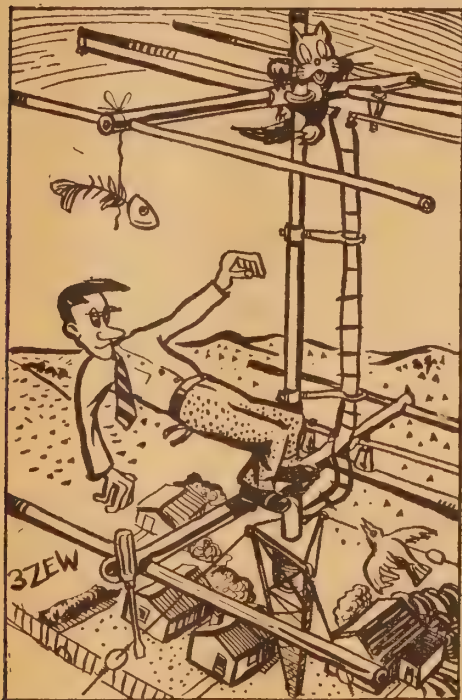
To the average of the top six logs shall be added a bonus arrived at by adding to this average, the ratio of logs entered to the State Licensees, multiplied by the total points from all entries.

Example:

Average of the top six logs +

$$\left(\frac{\text{Logs Entered}}{\text{State Licensees}} \times \frac{\text{Total of Points}}{\text{from all Entrants}} \right)$$

 Acceptable logs shall show at least five valid contacts.



"The Amateur is Balanced."

The trophy shall be forwarded to the winning State in its container and will be held by that State for a period of 12 months.

RECEIVING SECTION

1. The receiving section is open to all short wave listeners in Australia, but no transmitting station may enter.

2. Contest times and logging of stations on each band are as for transmitting.

3. All logs shall be set out as shown in the example. Logs must show first the call sign of the station heard (not the station being worked), the serial number sent by it and then the call sign of the station being worked. The scoring table to be used is the same as that used for transmitting and points must be claimed on the basis of the State in which the receiving station is located. A sample log is given to clarify the position. It is not sufficient to log a station calling CQ, nor is it permissible to log a station in the same Call Area as the receiving station.

4. A station heard may be logged only once for each band.

5. Club receiving stations may enter for the Receiving Section of the Contest, but will not be eligible for the single operator award. However, if sufficient entries are received a special award may be given to the top scoring receiving club station.

6. Awards: Certificates will be awarded to the highest scorer in each Call Area. Further certificates may be awarded at the discretion of the Federal Contest Committee.

Note: The Federal Contest Committee emphasises the need for strict observance of Rule 9 in the Transmitting Section and Rule 3 in the Receiving Section.

CONTACTS WANTED FOR SCHOOL RADIO CLUB

Shown in the photograph are two well-known junior operators, John (at left) and Mick (right), at the St. Joseph's Technical High School Radio Club station, VK2AXK/P. It is a "junk-box" rig, 40 watts to a 6146, dipole antenna.



The boys are on 40 metres nearly every day at 1245 and 1545 hours, but the bands are not well populated at that time of day, so anyone who can give the station a call will be doubly welcome.

WANTED!

ARTICLES

Can you write an article for "Amateur Radio"? How about one for Hints and Kinks?

CORRESPONDENCE

(Continued from Page 14)

articles. It is clear and concise and should help everyone in need of a plan to overcome Amateur interference to t.v. reception.

One comment I wish to make regarding the article is with respect to using the g.d.o. as an absorption wavemeter for the detecting of spurious signals.

It would appear that where the Amateur has used a g.d.o. for this purpose, the amount of sensitivity attached to the instrument is often lacking, as instanced in a case recently where a well known commercial make could register a dip at 200 Mc. in the final tank but no trace could be located using same as a wavemeter, yet the fourth harmonic from 50 Mc. caused severe cross hatch on Channel 9 over 150 ft. away.

However, using a super regenerative receiver (well shielded) an S9 signal was heard over 20 ft. away. It would appear that even a simple superregen. could be used as a detector, provided sufficient spectrum could be covered. Another, even better arrangement, could be a modified t.v. tuner ahead of a normal i.f. system providing audio output. A metered indication would provide a much more efficient source of identifying spurious signals.

The same instrument might provide, by means of a suitably switched range, comparative measurements of field intensity, both of the Amateur signal and t.v. signal for assessing the amount of spurious signal in the t.v. channel. It can safely be said that even a relatively small amount of signal inside the t.v. channel will cause cross hatch and where it is in relation to the picture carrier and its relative strength will determine the degree of interference.

It would be good policy if each Division could arrange for someone (or some groups) to construct such a device (call it what you may), to assist in the tracking down of harmonics from Amateur Stations.

—L. Poynter, VK3ZGP.

DX

John C. Pinnell, VK2ZR
15 Summit Avenue,
Earlwood, N.S.W.
Phone: UW 4248.

April was not a good month for DX and it finished up with the last day almost a complete "black-out". Since then conditions have gradually improved. At intervals the 10 metre band was open but most of the activity came from W/K's. 15 metres was not particularly lively; only odd signals were heard from Africa and South America, however, Europe was good at times. 20 was the mainstay and most of the work was done on that band.

Comments received were fewer and the lists, generally, were smaller. In my own case I had a fairly good month for numbers; landed 232 DX stations, but nothing very choice.

Any changes made in band allocations or conditions of occupation which affects the Amateur operators' normal procedure always causes a turmoil within their ranks. Adjustments have to be made. Such a case is the extension of the W/K phone band to 14350 Kc. which has thrown a large spanner in the DX phone works. These fellows will have to re-adjust themselves to the new conditions. One move afoot is to have the s.s.b. DX (except the W/Ks) move down to 14175-14200 Kc., when they want to talk to other countries and move up to 14300-14350 Kc. to work W/K stations. This is a problem to be solved by phone operators throughout the world.

NEWS AND NOTES

VK9HC is now active from Cocos Island on 14090. QTH: Joe Collister, C/o. Cable Station, Cocos Island, Indian Ocean.

ZD9AC left Tristan da Cuna at the end of February and returned to the Union of South Africa. Those who need Nick's QSL can reach him with this QRA: N. W. Meyer, "Dunmar," Goya Road, De La Haye, Bellville Cape, South Africa.

CR6CA is planning an expedition to Cabinda, which it is understood has new country status from A.R.R.L.

DL9PS is negotiating to operate from San Marino for two days early in August. Tentative dates are 5th and 6th August.

Rundy W3ZA has been issued OD5CT call and is presently on a trip covering EP, VU, VS9, I5, SU and ST.

Two W stations have been heard signing /EP; the legality of these stations is not clear at the moment. However, DL3RO was given permission on April 5 by the chief security officer of the Iranian Government to use /EP. So it seems that the EP situation will be cleared up in the near future.

W9ZQF, who operates ETECE, will be returning to the U.S.A. in July. He hopes to have club members keep the station on the air.

ZL3VH/3 of Chatham Island expects to be sent to ZM7 land in a few weeks time. He has a light weight 100 watt c.w. rig ready for the trip. His QTH is W.O.1 J. Pye-Smith, S.D. Signal Troop, Box 9015, Addington, N.Z.

No Amateur is included in the party that has been selected for duties on Willis Island, so there will be no activity from this rare spot for at least another year.

VR3Z has returned to the U.K. QSL via the R.S.G.B. (2QL).

I5GN is no longer active from Somali. I5TUF is the new station there and is said to be active on 15 metres. (L3065).

FR7ZD and FR7ZE are active from Reunion Island. We have been heard working FR7ZD at 1100-1300z on 20 metres. (L3065).

Sierra Leone, ZD1AW, has been fairly active on 14 Mc. c.w. around 0500-0700z. He has been putting a fairly good signal into VK2 but took some chasing as the Ws made the going really tough.

LX1DP, Luxembourg, is active on 14 Mc. c.w. and has been heard in Sydney around 2030 and 2130z.

ACTIVITIES

3.5 Mc. C.w.

2QL: JA7XF*, K3EKO*, JA3EA, UA0FR.
L2022: JAs, W/Ks.

* Call signs and prefixes worked.
z zero time—GMT.

7 Mc. C.w.

2QL: VR3Z*, G3LET*, HC2IU, UR2BU.

L2022: HA5KBF, JA1ANO, JA1DKA, JA1DZY, JA2BF, JA7XF, JA8KZ, K7BOX, KH6UL, KH6DDR, KM6BM, OH7NF, ON4CE, SP6RP, VR2DK, UA1KIW, UA4KQB, UA6KDO, UA9KKB, UA0KIA, UB5KCE, UB5QF, UC2AD, UP2KBA, YO3FD, YU5HUV.

BERS-195: FO2GP, HA3MA, KA2CC, LZ1KBA, TF5TP, UA1DZ, UA9KCA, UA0KZA, UB5KAG, UB5NK, VE7BCG, VQ2W, VQ3HD, ZE3JO, ZE8JW, ZS6NE, VP7BB/MM.

14 Mc. C.w.

2QL: FG7XF*, OD5CT*, ZS7M*, LX1DP, VK9HC.

2ZR worked CM2QN, CT1JY, DL0FO, F9QU/YL, G3HBM, GD3FXN, GI3NPP, HB9VK, JZ0PO, KP4CC, LA7JF, OH3PC, OK2XU, ON4DY, OZ3HW, PA0RU, PY1GJ, SM3AFN, SP5YY, UA4PA, UA0CF, UC2AD, UB5TJ, VE8TD, YO3FD, YU3AB, ZD1AW, ZP5LS, 9M2EG.

L2022: CX1RY, CT1JY, DL9YK, EA1BC, EA4CR, F2IV, FA3CT, FB8ZZ, FG7XG, FK8AU, FB8XX, GI5SG, GE3KFH, CT3AV, FA3CT, HC2IU, HC4IE, JZ0PC, KC6USV, KG6FAE, LU0AC, OH3NM, OH5NR/MM, ON4DY, ON4US, OZ4N, JT1KAA, PA0LZ, LX1DL, OZ3HW, SP3HD, TI2CMF, LU4DM, UB5WF, UC2KAC, UP2AC, UP2NM, VK0AB, VR3Z, VP1SS, W2AYN/EP, W2ZA/EP, YO3FD, YU1KAA, YV1AD.

BERS-195: CX2BT, DU7AW, W2AYN/EP, W3ZA/EP, F9UC/FC, FB8XX, HL2AC, HL9KR, IS1DKL, JZ0PC, KM6BI, KX6BQ, W2AIS/KV4, LX1DP, OR4TX, OY1AA, PJ2AE, PJ3AD, PY4ZG, PY7SA, SUIMS, UD6AM, UI8AK, UP2AC, UR2KAT, VR1B, VS9AZ, YV5FH, 9M2BK, 9M2CV, 9M2FS, 9M2GU, VE0NN, JA3API/MM, W1BVF/MM, KILHJ/MM, YU3OO/MM.

14 Mc. Phone

2AQJ s.s.b. worked: BV1USC, DL4AS, DU7SV, KA2IE, KA2SC, KA7DM, KA7DT, KA8PS, KA8RB, K3BHB, W3COG, K4AIM, K4MFW, K4TLB, K8RTW, W4EYI, W4RPZ, W4HYY, K6IPV, W6QHC, W7AEA, K4HIM/KL, OZ5KG, ZL3OP.

3AOM worked: GI3JIM, HC1FG, ON4GM, TG9CD, TG9RK, VE2PN, VE3AMF, VE3BS, VE3AIU, YV3BJ, VRs, W/Ks.

L2022: HL9KG, I1TID, JZ0HA, KA8LF, KC4AS, KC4DD, KG1CQ, K4EAE/KW6, VR2AS, 9M2DM, 9M2DQ; s.s.b.: KC4USH, KW6CP, KG6AIG, YV5AJK, ZK1BS.

L3065: F2IV, G2PU, G3NNT, GI3JIM, FK8AU, BV1US, HL9KJ, G6IF, KA6CA, KH6DFW, KA2KS, K4EAI/KH6, KH6CQV/KS6, KX6CA, KR6CW, VR2s, VE3BLO, VE3HI, VE7XC, VE7ZM, VK0PM, YV5AJK, TG9FI, OA4KG, OZ1QM, W/Ks; s.s.b.: BV1USC, CE3AGI, JZ0HA, KH6AWS, KW6DB, W/Ks.

21 Mc. C.w.

2QL: TI2CMF*, EL4A.

2ZR: DL7AQ*, DM2ACM*, KA2KC*, KG6AGT*, OE1UA*, VQ2IE*, ZD2IHP*.

21 Mc. Phone

L3065: DJ3WW, I1HL, I1UA, I1ZFT, KH6BFT, KH6CQV/KS6, KH6ASF, KW6DA/KM6, YV4CI, ZS1JA.

28 Mc. Phone

L3065: W3DQJ, W3LWA, W2LOT, W4WPH, W5FPN, W5YBI, W6ACU, W6FEX, W7FFD, W7GKD, W7RUC, W7MFF, W8IXU, W8PHJ, JA2KX, JA4PE, KH6BB, WA6CWM, W6EZA, KOEUW, TI2VBM, TG9CD, ZS5NK, ZS6YB, 9M2EB.

QSLs RECEIVED

2QL: VQ2JM, OQ5PS, FB8CE, PX1PF, MP4BCV, 5A1TP, ZB2I.

2ZR: HC8JU, UJ8AG plus another 127.

3AOM: TG9FI, TG9AL via W2CTN, VK0WH, XE2ME (YL).

L2022: FO8AU, MP4QAO, OK1AAA, UQ2KAA, VE7ID, VK0IT, VQ4AQ, YA1AO.

L3065: VK0IT.

BERS-195: GC2FC, MP4TAF, OQ5EH, PX1PF, UD6AM, UQ2AD, VQ3HD, VQ4HE, YV3BT, ZS4LG, 4S7EC, SP2RQ/MM, UQ2AE/MM, VP7BB/MM, 85 cards for month.

ADDRESSES

ZS4LG—M. P. Costhuizen, 17 Enslin St., Kroonstad, O.F.S.

4S7EC—N. Walker, 91 Centre Rd., Mattakuliya, Colombo, 15.

SP2RQ/MM—Bohdan Donderski, 4a Slaska St., Gdynia, Poland.

VP7BB/MM—BCM/QSL, London, WC1, England. (BERS-195).

HC4IE—Box 30, Manta, Ecuador.

VS9OM—Brian Smith, 4 Shaliman Rd., Acton, London.

FO8AC—Via W4KWC, 4226 Canby Lane, Decatur, Georgia, U.S.A. (I.R.C.) (L2022).

I wish to thank Frank 2QL and the "DX Bulletin" Kerrville, Texas, for information used in the DX News and Notes. Eric BERS-195 is one listener who seems to have a method to rake in rare DX QSLs; one from PX1PF has raised his total to 253 countries confirmed. I agree that 166 days was a long time for my card to be on its journey, via the Bureau, from VK2 to VK3, but all cards do not have the honour of doing the trip via London, hi! 3AOM George found the 20 mx phone band to be at a very low level in most directions, although the East side of U.S.A. and Canada was improving. Bud 2AQJ has found the change in the 14 Mc. phone band will need some re-arranging of procedure on the part of other countries using phone if the best use is to be made of the band. Ian L3065 is doing some good work on 28 Mc. and has now heard 26 countries. Don L2022 is happy to be in business again with an AR7 "hotted up". Reports were a bit light on this month. 73 for now, 2ZR.

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S W L

Maurice Cox, WIA-L3055
Flat 1, 37 Boyd Crescent,
Olympic Village, Heidelberg,
N.23, Victoria.

Hi chaps. This is your scribe again with the news of the s.w.l.'s. of Australia.

I would like to start this month with a grouch. On Tuesday, 19th April, a visit was arranged to the studios of the A.B.C. in Melbourne, but only seven members were present to witness a very interesting and instructive tour of installations and studios. The unfortunate part of the whole evening was the poor attendance.

The organising committee is most disappointed with the lack of attendance at the two visits that have been arranged this year. An interesting number of visits has been planned for the next twelve months and your attendance at future events would be greatly appreciated. I mean to say, after all, they are for you, aren't they? So how about it chaps?

If you have a particular place in mind that you would like to see, please get in touch with Ian Woodman at 24 Fewster Rd., Hampton, S.7.

Now for some interesting letters; firstly, from Eric Trebilcock, L3042, BERS195. He says: "My scores are now 265 heard, 253 QSL'ed, 40 zones confirmed." Last month believe it or not, he added five new ones to the received QSL confirmed list and this month has added one more; last month's newbies were Cape Verde Islands CR4AX, Willis Island VK4IC, (that reminds me, our President Mike Ide received one from Willis after waiting for five years), Br. Virgin Islands VP2VG, Turks and Caicos Islands VP-5ME, Chatham ZL3VB and ZL3VH/3 on 9/4/60; he had a QSL direct from DL9PF for his report on Andorra/PX1PF which was operated by DL9PF and two others. So you can guess that he is quite happy with his QSL results of the past few weeks.

In nine days of April, he received 44 QSLs, of which rarest are PX1PF, GC2FZC, MP4TAF and YV3BT. He has now 47 of the 48 States QSLs for the American H.A.S. certificate. He just received Montana WTHCW, but still needs North Dakota. Then he'll have the 48 States.

Sunday 3/4/60 he heard a rare one on 7 c.w. but guess it is very doubtful too—FO2GP who said he was in New Guinea but didn't give actual QTH or whether Dutch or British New Guinea HL. And furthermore, it was at 5.30 p.m. here so guess it more likely to be a VK putting one over.

On 7 Mc. he hasn't heard one European this month, but he's heard a few Ws and SAs. Still he has carried out his earlier statement that he wouldn't listen on 7 Mc., except that he'd had a peep there now and again for short periods. At end of last month two good ones heard on 7 Mc. c.w. were VS9OA and VS1KB.

On 14 Mc. this month he's made nearly 500 entries in nine days—all c.w., with some of the rarest being DU7AW, HL2AC, HL9KR, IS1-DKL, JZ0PC, W2AIS/KV4, PJ2AE, PY4ZG, PY7SA, UP2AC, UI8AK, VK9GK, VK0IT, YV-5FH, 9M2BK, 9M2CU, 9M2FS, KILH/MM near the Panama Canal.

Thanks very much Eric, always glad to hear from you about your doings, etc.

One from Dave Jenkins; it's a long time since we have heard from him and he reports that he hasn't been doing particularly much of interest in the s.w.l. line, but does manage to put in a few hours DX chasing from time to time. He has heard quite a string of 80 mx c.w. Europeans during February between 0515 and 0545 our time. Due to power supply troubles, he has been doing little listening this month. You'll see the 80 mx DX in next month's DX page. Dave's rx is a two-tube converter feeding into No. 22 rx at about 2 Mc. Antenna is a long wire with one end hooked to a barbed wire fence, so it might be miles long!! He had no luck with the South Africans in the s.w.l. contest, never heard even one; QTH NDG.

Here is a bit of news from Don Grantley who reports "Had a good trip back home, a trifle slow. The week-end was too busy; spent a busy Saturday morning in the city, rushed out to Croydon, not even having time to see Mac, then over to Ian's and on to Carrum where we stayed the night, returning home about 1 p.m. Sunday. Did some local visiting on Sunday p.m., Monday a.m. visited my

old pal VK300 at St. Albans, then over to Treb's for afternoon tea and a yap. And we yapped! Treb. is in favour of a single group, and will address the boys any time he can." Unfortunately he was unable to have any more time with me, but plans to get down again by himself in the not-too-distant future.

Now back there, all is well, he's in business again and the AR7 is doing very well. He has full coverage on 20, 40 and 80 mx. The 20 mx box is bandspread and from 180 to 330 on the dial covers from 14 to 14.4 Mc. The general impression of this particular AR7 is that it is fairly good, being fortunately free of images on 20, which as you realise is a big thing. Gain is good and the whole thing is fairly stable. To sort out his QSLs, he uses several small clips and keeps the cards hanging on these, one for each of the following Bureaux: VK2, R.S.G.B., I.S.W.L., Box 88, J.A.R.L., W2CTN (with whom he has an arrangement now via Treb.), and another for direct.

Don has an idea, which if it could be done, would be of great assistance to our members and to those of other States. That is the printing and selling of s.w.l. cards, designed by somebody who knows what he is doing, and made available to members and others at a reasonable cost. It would do three things, firstly make sure good reports went out; secondly, would swell the profits a bit, and finally lessen the expense for those of us who have to get them printed. He would require at least 2,000 per year, after the new Americans arrive, and he is sure there are many others who would use large amounts.

OVERSEAS S.W.L.'s.

The monthly mail bag here usually contains some letters from overseas listeners, some enquiring about our non-existent awards, others wanting information on listening in this country, but whatever the differences in the letters, they are all unanimous on one point—the Australian Amateur is very lax at answering listener reports. This may be the case, but I have a feeling that most of these chaps are at fault themselves. Some of the reports I have seen are a disgrace to the hobby, more so than some of the American QSL cards I have received. But that is beside the point, we here in Australia are, on the whole, building a good reputation for the quality of our reports; keep it up chaps and maybe as our cards go overseas they will be noted and commented upon to overseas listeners who, maybe, will catch on. Personally, I have no complaint with the Australian Amateur as far as QSL-ing is concerned. I have had an extremely high percentage of returns from our Hams and the remarks contained in many of them are most helpful and encouraging. There are a few snags about, but they are better forgotten, the average chap will help us along our not-so-easy way.

AWARDS

The DX Century Club or DXCC is becoming rather common these days, there are several about for the listener, but for the sake of simplicity I will quote from the I.S.W.L.'s. book of rules on the subject: "This award is made available to members of the above club, who have received confirmations from 100 countries of the world." As simple as that, but the stipulation in case of the I.S.W.L. is that the applicant must be a member of their League. Other clubs have their own rules, and it is to be noted that the proposed VK awards have provision for DXCC to W.I.A. s.w.l.'s. For those interested in the I.S.W.L. version, the address is 87 Barringer Rd., London; enclose 21/- sterling for membership; awards of this nature are issued free. Check list endorsed by the W.I.A. is necessary, and cards are not to be sent.

DX NEWS

Nothing really important to report this month. ZD3S is a pirate. VR6TC should be on from Pitcairn Island by the time this reaches you. FG7XC; cards outstanding from this fellow can be obtained from W3GJY who has the logs back as far as April 1958. FO8AC: QSL via W4KWC. LA9RG/P's mail is slow, so do not despair if you want a card; last clearance was in January; next late in May. W1BB has been heard in Leningrad on 16 mx, but so far no dice here.

SOUTH AUSTRALIA

Firstly, I would like to congratulate a 16-year-old lad, Colin Hutchesson, who won the receiving section of the N.F.D., with 770 pts. On behalf of all the VK s.w.l.'s, we offer you our congratulations for a mighty fine job well done OM.

Now to their news and doings. He hopes he's not too late with the news as unfortunately he has done very little this month regarding the Ham bands and he will be away

over Easter, so things will be very quiet there. Dale L5025 is very inactive also lately, as his parents are building onto their home, but he has antenna poles painted ready to be erected.

Gary Smythe, L5026, is a young member of the S.w.l. Group who is 14 years old and very keen on short wave listening. For a rx he uses a dual wave set tuning the 40 and 80 mx bands. Antenna is a half wave on 7 Mc., centre fed, with 3 inch spaced feeders (same as used here) and about 30 ft. in the air. Have not contacted Fred (L5021) this month, but will do so in the very near future, should have some news from Adelaide for the next month.

Thanks once again Colin; keep up the good work, it is very much appreciated.

NEW SOUTH WALES

Now here's a letter from Peter Carter, VK2ZPC-L2014, which will interest all s.w.l.'s. in VK land.

In the February VK2 Bulletin the S.w.l. Secretary outlined the state of affairs in that Group—especially concerning activity, or the lack of it. When related to the number of 180 odd members, this inactivity appears worse than deplorable. Now, may I suggest some reasons for it?

Among the 180 are many who were given W.I.A. Listener Numbers although they had no interest in specifically "listening", sending out report or collecting QSL cards. I submit that at least some members who joined the Institute as Associates only to more easily become licensed Amateurs, actually had listener numbers "thrust upon them". However, having thus become part of a Listener's Group I am sure some members looked forward to practical help in building and adjusting communications-quality receivers or perhaps refining existing ones. As things happened though, the assistance seemed hard to seek out, and for newcomers to a fairly specialised field, seeking-out can be very difficult.

As often is the way, greatest help was probably given by some willing individual Amateur Operator, in cases where the new Associate knew one with the time, interest and patience. Newcomers lacking such a contact and needing this help, may easily have lost a lot of interest. Of course, few of these things affected hardened, experienced listeners whose worthy aim in the hobby is to be even more efficient and prolific. We see repeatedly the same few members supplying lists of stations and countries heard, etc., and providing VK2 with most of the points in contests. Which leads to the next matter.

If members of the S.w.l. Group who have not tried their hand (and ear) in a contest, especially the R.D. Contest, could have even a short practical demonstration of "how to do it," I am sure the number of entries from VK2 would at least treble. According to "A.R." Dec. 1959, there were only 20 eligible logs from N.S.W. listeners. Even if the extra 40 listeners each logged for only ONE hour out of the whole contest—imagine the result! Maybe those extra 40 would like that practical "demmo". Now if that is the case, as with any of the other points I have mentioned, if the listeners concerned would write to the S.w.l. Secretary at 14 Atcheson St., Crow's Nest, that member, would I know, be put onto the right track. At the same time letters to the Group Secretary give the executive an index of their success or otherwise in their manner of handling Group matters. Without that sort of gauge they have no real way to measure this. What a frustration for a hard-working executive, not to be able to see the result of their work.

The holding of meetings in the new St. Leonard's quarters will, I feel, do a lot to improve matters in the technical and practical assistance field where such is required. The atmosphere will be of Amateur Radio; the spirit will be there and the gradual improvement of the Licensed Amateur's attitude towards both the "professional" listener and the "trainee amateur" listener must cause a re-entry of activity into the Group.

Letters (bouquets or brickbats) from the bulk of members not normally heard from are sure to be welcomed by the S.w.l. Secretary. It would be a loss to the Institute and a great pity in general if the Group was to be disbanded.

DX LADDER

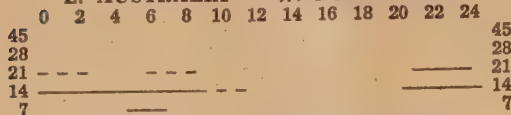
		Heard	Confirm.	Zones
L3042	Eric Trebilcock	265	253	40
L3088	Don Grantley	192	54	28
L3055	Maurie Cox	173	27	18
	Rod de Balfour	168	106	36
L3074	Mac Hilliard	157	51	—
L3065	Ian Thomas	118	16	13
L3015	Mike. Ide	86	27	—
L3072	Tom Haywood	72	8	—
L3006	Ian Woodman	4	1	1

PREDICTION CHART, JUNE '60

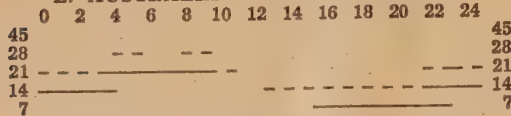
Mc. E. AUSTRALIA — W. EUROPE S.R. Mc.



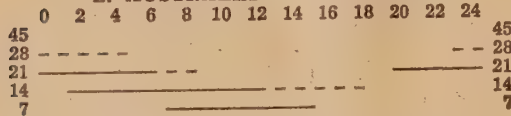
E. AUSTRALIA — W. EUROPE L.R.



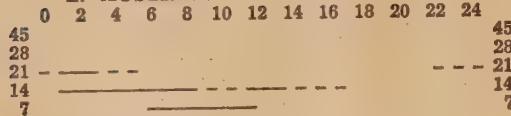
E. AUSTRALIA — MEDITERRANEAN



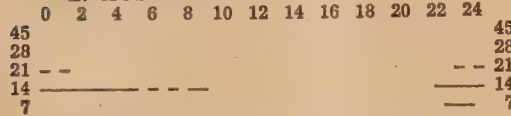
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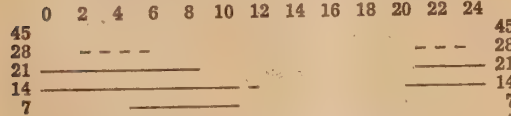
E. AUSTRALIA — N.E. U.S.A. S.R.



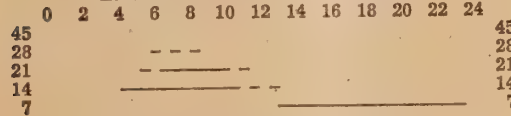
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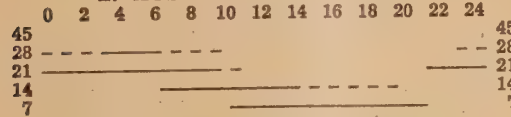
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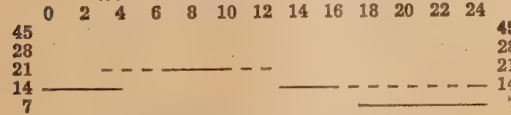
E. AUSTRALIA — S. AFRICA



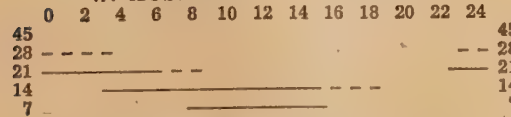
E. AUSTRALIA — FAR EAST



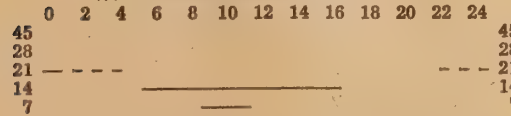
W. AUSTRALIA — W. EUROPE



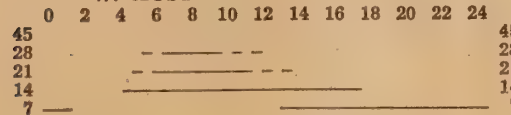
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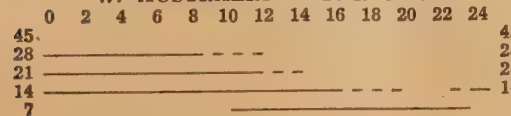
W. AUSTRALIA — N.E. U.S.A.



W. AUSTRALIA — S. AFRICA



W. AUSTRALIA — FAR EAST



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50 MEGACYCLES

Let's start from the VK3 angle. It is not every day that a KH6 pokes its way down there. The Easter week-end, as in other Divisions, was very good. Easter Monday was one out of the box. VK4 in the a.m., followed by JA at 1615 through to 2010, sigs to S9 during the latter stages. 2015 was the magic moment with K6HGP portable KH6 being heard and remaining in until 2135 at least. A number of the locals made the grade, 3ZER portable at Mt. Bunninyong being the first maybe. To say the least, Ron must have been excited. He told Wally that his elevation was 822 kilometres. While Ron is our portable king, this was the first inkling that the gang had that he had taken to hitch hiking on Sputniks. It was an excellent QSO with the KH6 peaking S7 as he did through the next hour to work 3CI, 3ZHF, 3ZBP, 3ZFM, 3ZAI and maybe others. Ron 5MK had a contact as did 4ZAZ.

Naturally all the boys were excited but that does not excuse them for the dog-piles which occurred. It reflected small credit on the operating ability of those who participated and undoubtedly prevented more contacts being made. Much to the chagrin of some of the group, it was later discovered that the K6/KH6 was not listening on his own frequency.

VK2ADE was also coming in for short periods and was heard calling the K6 and later W6PUZ, the latter station possibly being heard by 3ZJN though not positively identified. 3ZER was heard calling W6s. Gerry 3ZBN logged W6BER on band edge and other carriers were heard from the N.E. While this was going on, outside the l.f. band edge HLKA 9 plus for six hours at least with a plethora of other commercials to S9 beaming from E.N.E. to N.W. The VK4s belted in during the KH6 session, but found no takers in VK3 so they yarned to VK5 instead. JAs were still around at 2235 with 4ZAZ worked at 2300.

The whole Easter week was good for Es up and down the east coast, there being daily openings with VK2, 3, 4, 5, 7 participating. Good Friday from 1600 for a couple of hours an excellent VK3/4 opening with a great JA burst Easter Saturday, one of the best ever, commencing around 1715 with the peak 1830-1900. Around 1440 this day JA were working VK4, 5, 6 and ZL and being heard in VK3. In the morning Es VK3/5, in the afternoon VK3/2, 4.

The general picture for the month is one of reasonable DX shared by most Divisions. All worked JA more than once (Russ 9XK is back on the job and in the thick of things again), VK6 and 7 only missed KH6, while every day of the month outside the band there were numerous commercials to ponder on.

April, what a month! But the clouds came down at the start of May and for VK3 not much offering apart from local contacts.—3OF.

NEW SOUTH WALES

Welcome to the newly elected scribe for VK2, meet Barry 2ZAG in the notes. (3OF).

General.—The new committee was elected at the April meeting of the V.h.f. and T.v. Group, now meeting at the new rooms at 14 Atcheson St., Crows Nest. Chairman is Bob 2OA, Secretary is Bob 2ZAR. Other committee members are John 2ZAV (Group Liaison Officer and V.h.f. Officer at the official station at Dural); Lance 2ZKP and Phil 2ZBX (Contest Committee); Barry 2ZAG (Publicity Officer, Technical Officer and Official Scribe for "A.R.", also Lecture Organiser).

50 Mc.—Activity is at a low ebb. Bill 2ABR QSOed JA3ASP on 16th April at 2013, also had a half hour QSO with VK4ZBE. He has heard a few JAs since but they have been too weak to work. Also heard VK5 and VK3 working each other. Other Sydney stations active are Dave 2ZDE, Alan 2RX and Dick 2ZCF. 2HE is at present moving QTH, hence gear out of action. Over Easter week-end 2ZCF worked VK3, 4, 5 and JA, also heard these Divisions working JA. He has called JA since without success. Generally the band is dead, with very little activity. Reports are to hand however of widespread Channel 2 t.v. interference between States, also press reports of Moscow and Peking t.v. on 48 Mc.

144 Mc.—2ER busy measuring frequencies of stations in the band, a much appreciated service. These are given over the Sunday evening broadcast. The next day event programmed is to be a two-station D/F Field Day on June 2.

A surprise scramble on Sunday evening, 24th April had approx. 22 stations; winners were 2ZCF and 2AWZ. The lecture for the June meeting of the Group will be given by Bob 2ZAR on 1215 Mc. gear. A number of new Z calls are active on the band including several above 145 meg. Try tuning up higher.

288 Mc.—No activity reported lately.

576 Mc.—Activity rising. 2ZCF, 2HO, 2HL, 2ABZ and 3ZCN portable Camden are heard. Best DX, 2HL to 3ZCN/P about 40 miles. Much effort is being put into xtal controlled tx, with 3ZCN/P already having his on the air.

The following northern VK2 news comes from Ian 2AXI. The 144 Mc. band has lapsed into the doldrums but there are many Hams active or have gear ready for any opening on 50 Mc. Most stations have had many JA contacts over the summer months and all had a good time over Xmas with the Interstate openings. Inverell has the greater Ham population with 2ZER, 2ATS, 2ADT and 2ZX with gear for 50.

Country v.h.f. enthusiasts would like to know of 144 Mc. activity in Sydney, number of stations active, average power run, favoured types of antenna and news of activity on 56, 288 and 576 Mc. Many chaps keen for 144 Mc. activity but all feel the need for tube or tubes for 50 to 100w. final without the expense of a new QQE06/40.—2ZAG.

VICTORIA

April has been quite an interesting month here in VK3. Abnormally high activity has been noted particularly outside the 6 mx band between 48 and 50 Mc. Probably the most that has been heard down in this area. Past years that I can recall have not seen so much expectation building up to the opening to KH6 in the middle of the month.

The April V.h.f. Group meeting was held in VK3 and was also the annual election of office-bearers for 60-61, who are as follows: President, Herb 3OJ; Vice-Presidents: Len 3ZGP and Kel 3ZFQ; Secretary, Bob 3JO; Assist. Sec., Bert 3ZGD; Publicity and b'cast, 3ZDG; Notes, 3ZGP; meeting organiser, Bob 3ZAN.

General business followed when 3ALZ submitted two records for recognition: (1) 50 Mc. on 1/5/59, VK3ALZ-XE1FU, 8,500 miles; (2) 288 Mc. on 10/1/60, VK3ALZ-VK7ZAI, 290 miles. Any takers?

Kel 3ZFQ gave a talk on 6 mx Converters, describing the Mc3ZFQ Special—min. parts, max. performance, backed up with the "patented" h.f. xtal filter in the i.f. Sounds quite a nice rx. Perhaps he will publish details in "A.R."—3ZGP.

The following Eastern Zone stations are all active on 6 mx when conditions are favourable: 3ZCR, 3ZDP, 3ZBR, 3ZCG and 3ZAT. 3ZBR and 3ZDP are also mobile on 6 mx. 3ZAB has equipment in the making and should be heard quite soon.—3ASS.

144 Mc.—Contrary to general opinion, two metre activity in East Gippsland has been very good of late. Sale is the centre of activity with 3ASS, 3ZCR, 3ZGV, 3ZDP, 3ZBR and 3ZDY comprising the local net. Further afield there are Cliff 3AIT at Pearsonsda, Stan 3ZAB at Traralgon, Gordon 3TH at Yinnar, Ron 3ZD at Warragul, David 3ZAT Maffra, David 3DY Maffra, and George 3ZCG at Moe. Their skeds are at 8 o'clock on Thursday and Sunday nights between 144.1 and 144.7 Mc.

Welcome to 3AJL (Warragul) and 3ZJM (East Newborough) to the Eastern Zone. Hope to hear them operating in the very near future. The Eastern Zone Convention is to be held at the QTH of Graham 3QZ. Interested Amateurs should tune in to 3WI on Sunday morning for further particulars. All beams point west to Melbourne and Ballarat, so what about those boys looking east and breaking in.—3ASS.

QUEENSLAND

50 Mc.—No listening until 3rd April when there was quite a bit of activity below 50 Mc. peaking KH6 way about 1100-1200. JA1, 2, 3, 7 around 1500-1540 up to S9, 4PU doing business. 1800 K9KVY/KH6 running 40w. to 11 el. Yagi heard working ZL at S9. 4ZAA and 4PU on the band, 4PU worked the K9/KH6, also 4PG doing business. KH6GDY heard S3 and K6HGR/KH6, Alice, working VRIAB.

6th: KH6BKB/M worked 4ZAX, 1810 K6HGP/KH6 working Ralph 4ZCH. S9 here, also heard KH6DFE at S4, 1825. 1833 4ZBI collared onto K6HGP/KH6 (Walt), then 4ZBE, 4RW worked him. Gave Q5, S2/4 to 4ZBI who was using 9½ watts. By the way, 4ZCH was running 7w. during his contact. Walt, K6HGP runs 45/48w. to a Gonset Communicator. 1845, Russ 9XK was heard working him.

The following are listening reports. 4ZBI's tx blew up and was off the air for 24 days. 8th, 1918 JA1, 4, 6. Believe 4ZAX worked JA2, 5, 7 and ZL on the 15th. 17th, 2010/30 JA1 to 4. 4ZAZ has a 9 el. under construction. 27th, JA up to S5 at 1900, 29th 1758-1927 JA1, 2, 4. Dane 4ZAX busy, also 4PU with 5KK and others. 30th, worked John 4PU and Mick 4ZAA and I'm back on the air.

144 Mc.—John 4PU and Len 4ZBS work eight miles for 20 minutes at S8 both ways using "rush boxes". John should have xtal control now, well he has a 46.5 rock for it, so have a few other blokes in the near north coast net.—4ZBI.

WESTERN AUSTRALIA

The 50 Mc. band showed signs of sinking into the doldrums with a very quiet March and early April. JA and local activity were at a low ebb. However, April 16th proved to be the best day for JA DX experienced so far. The band was open almost continuously from 9 a.m. to past 9.30 p.m. JAs from all districts except JA6 were worked, with the emphasis on JA8. From 49.5 to 50 Mc. was full of the usual commercial QRM: HLKA, t.v. from the North, r.t.t.y., c.w., phone nets, etc., etc. The t.v. signal was the subject of more attention than the JAs but results on the whole were disappointing. 6ZBG and 6HK both made out a test pattern with a large circle, a couple of lines of printing and some Olympic-emblem-like circles in one corner. Definition was too poor for any further information to be gained. Similar results followed the next day April 17.

An "expert opinion" from a Government t.v. authority stated that "the signals appear to be Asiatic" and "could possibly be Malayan t.v. test signals." He concludes by making the stupendous observation that "some very strange things happen on air waves!"

Some disappointment is felt at the non-working of ZS on 6 mx. From conversation I and others have had with ZS stations, I feel that the use of the band in ZS is too limited to provide the hours of observation necessary to spot a break through.

Lectures at the last meeting were provided by 6AW (transistorised power supply), Les Cloud (modern Japanese test meters), 6ZAV (a 2 mx converter) and 6ZCF (6 mx v.f.o.). These short talks proved to be very interesting.—6ZAV.

TASMANIA

Peter 7PF is now Secretary of the Northern Zone, W.I.A. VK7. Col 7LZ has taken over the notes. Welcome back Col. Keep the news up to him fellows via sked or whatever means you have.

144 Mc.—April 7 there was a short breakthrough to 3ZAT at 2000, the sigs both ways S8. By 2030 they were almost out. 3ZDP also heard but unfortunately too late as the band folded up. This was the only recorded activity.

50 Mc.—The evening of April 13 gave viewers an excellent programme from Brisbane. At 2100 the VK4 gang came in at good strength on 50 Mc. At 2155 7LZ QSOed 4ZAX, sigs fluctuating S3 to 8. 4WD was also contacted, sigs S7 both ways.

The 15th, the Easter Bunny arrived bringing Easter Joy to the several VK7s with a colossal opening during which VK2, 4, and JA were worked by the gang. It was possible to call CQ JA and listen to only hear VK4s all about S9. Next the VK4s would disappear and the JAs would be back again. April 16 started well, at 0930 4ZAA/7LZ, sigs S8, then 4ZGL/7LZ. The band appeared to be open until 1200. At 1920 7LZ heard JA2AOV and several other unidentified JAs but they faded out at 1950 and no contacts were made. VK7CA advised that he had been receiving ABV2 from 1500 to 2000. The 18th, 4ZCM and 4ZAX were QSOed by 7LZ and JA1BIG was contacted at 2000 although no QSO was made due to QSB. 4ZAX was the last QSO of the month. Dane was worked at R4 S5 at 2115 on 30th by 7LZ, a fitting climax to a very successful and satisfying month of 50 Mc. activity.—7LZ.

AMATEUR T.V.

The main interest this month has been the transmissions from the P.M.G.'s u.h.f. t.v. tx at Dandenong (inspected by the A.T.V. Group on 2nd Feb.). The R.C.A. tx has a 1kw. output, video on 529.25 Mc., sound 534.75 Mc., and is capable of color. The video modulators are eight 6146s in parallel, series cathode modulating 4 X 150As. Reports on the above so far are better signals and definition than Channel 2 in Geelong.

3AUX is making a 530 Mc. converter for the above. 3AAK hopes to have a vidicon camera tube soon. 3ABK is also making a 530 Mc. converter. 3ALG now has his t.v. tx permit. 2AWW is building a second flying spot scanner. 5AO has cleared up the snow from his f.s.g., found it due to his e.h.t. supply. Anyone interested in a.t.v. could contact any of the above or 3BU/T.

FEDERAL

Fed. President: G. M. Hull, VK3ZS.
Fed. Assist. Secretary: W. Mitchell, VK3UM, Box 2611W, G.P.O., Melbourne, C.I, Vic.
Federal Councillors:
 New South Wales—Bob Godsall, VK2ARG.
 Victoria—Alan Elliott, VK3AEL.
 Queensland—Bert Hinkler, VK4AO.
 South Australia—L. H. Duncan, VK5AX.
 Western Australia—Ron Hugo, VK6KW.
 Tasmania—E. J. Cruise, VK7EJ.
 Papua-New Guinea—Russ Coleston, VK9XK.
Fed. Contest Committee: Alex Hubbard, VK7AX, Manager, Box 851J, G.P.O., Hobart, Tas.
QSL Bureau: R. E. Jones, VK3RJ, 23 Landale Street, Box Hill, E.11, Vic.
Awards Manager: Alf Kissick, VK3KB, 1 MacFarland Street, Brunswick, N.10, Vic.

NEW SOUTH WALES

President: Ted Whiting, VK2ACD.
Secretary: Norm Beard, VK2ALJ. Address mail to Rooms at 14 Atcheson St., Crows Nest, N.S.W.
Meeting Night: Fourth Friday of each month at Science House, Gloucester Street, Sydney.
Divisional Sub-Editor: Max Pfeffer, VK2MP, Lot 52, Braddon St., Blacktown.
QSL Bureau: 14 Atcheson St., Crows Nest.
 Frank Hine, VK2QL, Manager, assisted by Allan Smith, VK2AIR.
Zone Correspondents: North Coast and Tablelands: Noel Hanson, VK2AHH, Ryan Ave., West Kempsey; Hunter Branch: R. W. Rose, VK2AQR, 17 Brooks St., West Wallsend; Coalfields and Lakes: H. Hawkins, VK2YL, 9 Comfort Av., Cessnock; Western: W. Stitt, VK2WH, "Cambijowa," Forbes; South Coast & Southern: E. Fisher, VK2DY, 2 Oxlade St., Warrawang; Sth. Western: J. W. S. Edge, VK2AJO, Wallace St., Coolamon; Tamworth: S. Smith, VK2APS, 50 Upper St., Tamworth.

FEDERAL

I.A.R.U. YEAR IN REVIEW

The big event of the year was the successful conclusion of the Ordinary Administrative Radio Conference in Geneva. Although there were several serious threats to the Amateur bands, Amateurs emerged from the conference with practically all the privileges granted under Atlantic City. The loss of 50 kc. at 40 metres (in Regions I. and III.) is indeed unfortunate, but hopefully there should be less broadcasting use of the "exclusive" Amateur segment which remains at 7.0-7.1 Mc.

It is clear even to the casual observer that the excellent DX conditions which have existed during the past two years are on their way out, with the downturn in the sunspot cycle. Nevertheless, at times conditions have been very good, and a great many QSOs have taken place internationally on the 10, 15 and 20 metre bands. Conditions should get progressively poorer on these bands during the next few years, but at the same time more DX should be possible on 40, 80 and 160 metres.

While the h.f. bands showed signs of quietening down, experimentally-minded Amateurs have continued progress on the Very Highs. W6NLZ in California worked KH6UK in Hawaii on 220 Mc. The new record of 2,540 miles, set on June 22, 1959, parallels that for 144 Mc., set a year earlier by SM6ANR and G3KEQ on June 13. W6DQJ and K6AXN hold the record on 1215 Mc., having covered 400 miles on June 14. On July 24, W7JIP/7 and W7LHL/7 worked 187 miles in the 10,000 Mc. band.

Interest in the Worked All Continents Award remained high, with 1,811 certificates being issued, 744 of them for phone, compared with 2,425 total and 998 phone in 1958. There were 105 endorsements for single sideband, 11 for 50 Mc., and five for 3.5 Mc., as against 100, 16, and six respectively. The QSL cards submitted by two W.A.C. applicants represented work done entirely by radioteletype though no special recognition has yet been made up for this mode.

Membership in the Union stood at 54, with no admittance during the year, but an application for membership is presented in this Calendar on behalf of the society in Angola. A portion of the time of six A.R.R.L. employees was devoted to the handling of I.A.R.U. affairs.

—Extract from the I.A.R.U. Calendar.

SUMMARY OF I.T.U. MONITORING REPORTS

Here is a summary of unauthorised stations heard in the Amateur bands during the period May through October, as reported by the International Frequency Registration Board. Stations operating in accordance with the Atlantic City Convention (1947) are not reported.

NOTES

VICTORIA

President: D. A. Wardlaw, VK3ADW.
Secretary: J. R. Lancaster, VK3JL.
Administrative Secretary: Mrs. Forbes, 478 Victoria Parade, East Melbourne, C.2. Postal address: P.O. Box 36, East Melbourne, C.2.
Meeting Night: First Wednesday of each month at the Radio School, Royal Melbourne Technical College.
Divisional Sub-Editor: P. D. Williams, VK3JZ.
QSL Bureau: Inwards and Outwards—W.I.A., Vic. Div., P.O. Box 36, East Melbourne, C.2.
Zone Correspondents: Western: W. J. Kinsella, VK3AKW, Magdala, Lubeck; South Western: W. Wines, 48 Cranley St., Warrnambool; Far North Western: M. Folie, VK3GZ, 101 Lemon Ave., Mildura; Midlands: R. Jonasson, VK3ND, Farnsworth St., Castlemaine; North Eastern: T. K. Tennant, Park St., Tatura; Eastern: W. G. Francis, VK3ZCG, 30 Windsor Ave., Moe.

QUEENSLAND

President: W. J. Rafter, VK4PR.
Secretary: S. J. Armstrong, VK4SA, Box 638J, G.P.O., Brisbane.
Meeting Night: Fourth Friday in each month at the State Service Union Rooms, Elizabeth Street, Brisbane.
Divisional Sub-Editor: W. J. Rafter, VK4PR, Willandra St., Alderley, Brisbane.

QSL Bureau: Jack Files, VK4JF, Vanda St., Buranda.
Zone Correspondents: Maryborough: R. J. Glassop, VK4BG, 80 North St., Maryborough; Townsville: R. K. Wilson, VK4RW, Hogan St., Stuart, Townsville.

SOUTH AUSTRALIA

President: L. F. Brice, VK5OK.
Secretary: J. C. Haseldine, VK5JC, Box 1234K, G.P.O., Adelaide. Telephone: M 7851.
Meeting Night: Second Tuesday of each month at 17 Waymouth St., Adelaide.
Divisional Sub-Editor: W. W. Parsons, VK5PS, 10 Victoria Ave., Rose Park, S.A.
QSL Bureau: G. Luxton, VK5RX, 27 Belair Rd., West Mitcham, S.A. (Inwards & Outwards).

WESTERN AUSTRALIA

President: L. Roeger, VK6HR.
Secretary: L. S. Eddington, VK6LS, Box N1002, G.P.O., Perth, W.A.
Meeting Night: Third Tuesday of month at Perth Tech. College Annexe, Mounts Bay Rd.
Divisional Sub-Editor: P. Haywood, VK6PH, 2 Barnsley St., Queen's Park, W.A.
QSL Bureau: Jim Rumble, VK6RU, Box F319, G.P.O., Perth, W.A. (Inwards and Outwards).

TASMANIA

President: T. Allen, VK7AL.
Secretary: K. E. Millin, VK7KA, Box 851J, G.P.O., Hobart.
Meeting Night: First Wednesday of each month at W.I.A. Clubroom, 147 Liverpool St., Hobart.
Divisional Sub-Editor: I. Nichols, VK7ZZ, 9 Cressy St., New Town.
QSL Bureau: J. Batchler, VK7JB, 39 Willowdene Ave., Lower Sandy Bay, Hobart.
Zone Correspondent: North Western Zone—Terry Tongs, VK7TT. Northern Zone—Ray Waldon.

FEDERAL AWARD MANAGER RETIRES

After five years of service to the Federal Council as Federal Awards Manager, Gordon Weynton, VK3XU, has, due to circumstances beyond his control, found it necessary to relinquish this important post in the W.I.A. During the five years in office, Gordon has given to the task of keeping the records of Awards—both national and international—the same painstaking care as he devotes to every other activity he takes part in in other spheres. On behalf of Federal Council best wishes are extended to Gordon and sincere thanks for the work he has carried out.

Alf Kissick, VK3KB, will be taking over the Awards Manager's office as from June, 1960. In Alf we have a man who is well acquainted with the necessary knowledge for this duty and we ask all those who submit cards in confirmation of the various Awards to do so in accordance with the rules pertaining to the particular Award, thus making the work very much easier, at the same time precluding the possibility of delays in receiving your certificates.

Claims for Awards are now to be forwarded to Alf Kissick, VK3KB, 1 MacFarland Street, Brunswick, N.10, Vic.

FEDERAL QSL BUREAU

The annual contest of the L.A.B.R.E. (Brazil) is set down for September this year. For c.w. from 0001z Saturday to 2400z Sunday on the first week-end in that month. For phone, the times are similar but on the second week-end. Logs to "L.A.B.R.E. Contest Commission," Caixa Postal 2353, Rio de Janeiro, Brazil. Full details may be had from the Federal QSL Bureau.

For the information of the numerous applicants for the 1959 issues of "CQ" mentioned in these notes in May "Amateur Radio," I have to advise that the first applicants were VK2DI and VK2GJ. As their letters arrived in the same mail, the issues were divided between them. Glad to know that somebody reads these notes.

One of the most sought after South American DX stations is OA4KF whose operator, Evert Kaleveld, is ex-PA0XE and ex-OA7I. Evert is a railway engineer employed on the highest railroad in the world. It reaches a top altitude of 13,550, repeat 13,550, feet above sea level. OA4KF uses only 25 watts to a long wire antenna which he finds is all that is necessary to contact the world. He will QSL all contacts and useful reports via P.O. Box 538, Lima, Peru. (BERS195).

Since Willis Island was constituted a separate country, have had many requests for the present address of VK4SQ who was located at Willis Island in 1948. Can anyone supply please?

—Ray Jones, VK3RJ, Manager.

Stations heard in the Amateur bands only once or twice during the six-month period are not reported either.

Frequency	Call/QRA	Type of Signal	Nationality
3788	EQD/EQO	Broadcast	Iran
7007	Valladolid	Broadcast	Spain
7008	APK	Broadcast	Pakistan
7012	—	Broadcast	Spain
7014	HM21/22/23	Automatic A1	Korea
7050	Cairo	Broadcast	U.A.R.
7050	—	Broadcast	France
7072	Mogadisclo	Broadcast	Somalia
7080	Bangkok	Broadcast	Thailand
7085 &	—	—	—
7090	Ioannina	Broadcast	Greece
7095	—	Broadcast	Spain
7100	—	Broadcast	U.S.S.R.
14200	RIF37	Multiplex F1	U.S.S.R.
14265	Tangler	Broadcast	Morocco
14288	4XG33	F1 (Parasitic)	Israel
14314	Tirane	Broadcast	Albania
14340	LCP	A1	Norway
21002	VNB48	Automatic A1	Australia
21245	MBR	F1 (Harmonic)	England
21300	—	F1	U.S.S.R.
21450	OLR7A	Broadcast	Czechoslovakia

(The U.S. State Department says that OLU is operating legally at 21,001 Kc. Table, since Czechoslovakia did not sign the Atlantic City Convention.)

—Extract from the I.A.R.U. Calendar.

FEDERAL QSL MANAGER GOING OVERSEAS

Mr. Ray Jones, VK3RJ, Federal QSL Manager, accompanied by Mrs. Jones, will be leaving the shores of their native land in August for a six months' trip abroad. Ray proposes to call on a few of his DX friends during his trip if his itinerary permits.

During his absence, world renowned short wave listener, Mr. Eric Trebilcock, BERS195, will carry on the duties of the Federal QSL office.

Federal Council wish Mr. and Mrs. Jones a successful tour and a safe return in due course.

SILENT KEY

It is with deep regret that we record the passing of:—

VK3VA—W. B. Bridger.

VK6BC—Bert Congdon.

NEW SOUTH WALES

Falling on the eve of the Anzac Day holiday week-end, the April meeting of the Division could not be opened as only 32 full members were in attendance. The attendance totalled 44 and included Eddie VK5OW from Darwin.

Those who failed to attend missed an excellent lecture by Joe VK2JR on High Frequency Direction Finding. In his whimsical manner, Joe spoke of the early experiments in wireless direction finding and traced the development of D/F through the years. The systems which Joe described for Amateur use are simple to build and effective in use. The lecture is available on tape (send your tape direct to Joe) and 35 mm. slides of the diagrams are also available at 10/- per set.

The country Amateur Radio Clubs in VK2 are continuing to increase both in activity and numbers. Best of the club news comes this month from the Griffith Amateur Radio Club. Activity in this club is high with members travelling scores of miles to attend meetings. The A.O.C.P. class which the club is conducting has attracted a housewife (Mrs. Leaver) and her fourteen-year-old son who travel 12 miles to attend the classes. Congratulations, Mrs. Leaver, and your son.

Wal 2AXH celebrated his 75th birthday on 5th May. Readers are reminded that Wal was the first Secretary of the Wireless Institute when it was founded in Sydney 50 years ago. The Divisional Council extends congratulations and best wishes to our senior member.

The various sub-committees of the Division have settled in and are working steadily at their respective tasks. The VK2 Division is assuming gigantic proportions and Council is eager for volunteers to assist in the multifarious tasks involved in the management of the Division. Can you help?

HUNTER BRANCH

No doubt by now all those naughty boys who have been causing t.v.i. have suppressed their unwanted harmonics (at least those who attended the lecture by Hans 2AOU at our last monthly meeting). Police Radio was represented and my spies tell me that they constructed the filters quoted by Hans and their installation caused much satisfaction all round.

Those present were 2RJ, 2AYL, 2CS, 2ANG, 2AKX, 2ZL, 2ZMO, 2ZSF, 2ZNW, 2XT, 2FP, 2VU, 2CN, 2QB, 2JE, 2SF, 2AQR and associates Sutherland, Finch, Stobbs, Gray, Bailey, Mullins, Davies, Fyfe, Finlayson, Ansell, Daley and Webster. Harry 2AFA sent his apologies. Must be too wet up Singleton way as Geoff 2VU is an all too infrequent visitor. Did you notice that your President, Lionel, has joined the select circle of pipe-puffers and not the Water Board type either?

To relieve the responsibility of operating 2AWX on Monday nights a roster is being drawn up, 2SF and 2AQR have joined the panel, but a third is wanted. However, if conditions do not improve no one will be needed as there will be nothing to re-broadcast and even if there was, there would be no one able to receive same. The meeting concluded when your V.P. Varley thanked Hans for his constructive and informative discourse.

At present your Secretary, Gordon, is on holidays in Sydney, whilst Liaison Officer, Stuart, thumbed a ride to Melbourne—hope someone warned them. They tell me the reason why Les 2RJ is not on so much these days is because he is busy building a home incorporating a shack of course.

Despite the publicity, there was a very poor support of the social meeting to deal with Blackalls—will have to do better than that boys—the willing few need your help, support and ideas.

Now and then we get a surprise from Jack 2KQ, when he calls 2AWX. As usual 2XT, "Bring-'em-back-alive Bill," did himself proud at Urunga; came second in the scramble and won the Jerry Challenger trophy with Ernie 2FP as navigator. Up there, Jack 2ADT gave a call and wondered what was wrong with his meters until he discovered that his married daughter had hung wet nappies on his feeders.

Ivan 2AIM and his retinue called in at 2AQR on his way back from Urunga and made his mouth water with the activity up there. No need to ask who won the lucky ticket—is there, Erica? Was contemplating going to Urunga next year, but find that Easter Saturday is April Fool's Day and with that mob up there, anything is liable to happen.

Many of you probably remember that s.w.i., "Key-Hole Harry"; well, he now has a ticket, 6ZCK; congrats, Harry. Was very sorry to read in May "A.R." that Don Knock VK2NO is listed in the cancelled call sign.

Next meeting, chaps, is at the usual place, same time, and the date—June 10. See you there?

VICTORIA

MORALE AND CONSCIENCE PRICKING SECTION

Red Riding Hood may have said "What a big mouth you have Grandma" and managed to get away with it under different circumstances to that related in the old fable. Like the heroine I am suffering a comparable fate for having opened the aforementioned item at a recent VK3 meeting and henceforth your Divisional notes come from the extremely scratchy pen of 3IZ.

I'm not complaining, mind you, but like the press at the "Chronicle," I can only make an "impression" if I am fed with paper—paper containing information, ideas, criticism or even downright libel!

Not that I want to conduct a lonely heart's column—far from it—but I can only reflect the general feeling of Amateur Radio, its development and progress through you or your Zone's ideas.

You know, one thing that's struck me since I have been able to attend a couple of meetings here in the city is the grim determination of your Divisional Officers to really get things moving in VK3, despite what can be called lethargy on the part of some country members to state their case.

This plea has been stated, printed and undoubtedly prayed, many, many times, but I suppose that if you aren't informed of the doings of the Institute, particularly if you have some latent interest, you tend to become browned off. I know, I lived in the country!

Your Council is young, enthusiastic and has ideas of its own. Your Editor has plans, your 3WI script writer has plans—in fact everyone has ideas that are designed to further Amateur Radio in this Division if not the Commonwealth.

So then, if you want to know what goes on, listen to 3WI and if its of sufficient importance to be repeated in print, it will be done.

Incidentally, what have you been thinking of the broadcast lately? 3AKJ writes the script as you know, and is like a small boy waiting for Xmas Eve. He wants you to let him know how it's affecting you.

GENERAL AND PERSONAL

You know, Angus 3IY is a staunch adherent of s.s.b. He must have felt like a missionary confronting the lost tribe the other night at the May meeting. Fortunately Angus' exposition on the virtues of s.s.b. v. a.m. was presented at the beginning of the evening, otherwise the bleary eyed combatants would be in even poorer shape. General business began at approximately 2230.

However, back to the s.s.b. Angus rather deliberately, I thought, pointed out the obvious advantages of sideband at great length, and very ably presented the technical details of his filter rig which is essentially the same as that described in a recent issue of "QST."

The best was yet to come, for when Angus had dealt with the technical queries, the slumbering and otherwise occupied c.w. and a.m. men were jolted to awareness by a confusion of words from several quarters. Essentially, the verbiage dealt with the problem of "splatter" caused by s.s.b. stations as received on a normal a.m. receiver and why couldn't, or rather, why should s.s.b. stations be allowed to exist at all as they render the band useless for a.m. stations. The minority, etc., etc.

The ensuing roar was possibly like the state of affairs on 40 mx when the AC4 came on, and from the confusion snatches of the Amateur's Code could be heard, viz. the Amateur is balanced even to his modulators, to which the quick retort came that the speaker was biased. Quite a negative approach to the problem, I think, but I'm not positive.

They were still at it at the break before general business, and whilst inspection of 3IY's transmitter was in progress.

General business was, of necessity, brief, but the problem of QSL distribution was raised and deferred until next meeting. Strong words were used here too, but final revelations will have to wait until next meeting. However, it can be said that the question is whether the present system of a Federal QSL Bureau is satisfactory or not. It was pointed out that there is no collective Bureau as such in U.S.A. and QSLs go to each Call Division. Perhaps this may be the answer to the problem here in VK. Comments for and against will be welcome before the next meeting.

We were pleased to welcome Jack Cummings from the Army Apprentices School, together with one of the lads from Balcombe. Visitors are always welcome and if the present verbal exchanges continue at future meetings, everybody will be assured of a pleasant evening. XYLs note—the OM will be late.

A note about the W.I.A. building in Victoria Parade. Repairs have been found necessary—

report has it that earth tremors had something to do with it, although the source of these wasn't stated. Anyway, tender for the job has been accepted and we look forward to having the rooms in fine shape once again.

Some individual comment has been made about disposals. Firstly, the administration of R.A.A.F. disposals has shifted from VK3 to VK2. Perhaps this is why it is alleged that VK2 chaps are getting equipment we are not. For my own part I would like to suggest that a Commonwealth Pool be set up from which allocations to the States could be made. There would be difficulties, to be sure, but if it would give equality the necessary machinery would not prove too difficult.

Secondly, the Disposals Committee in VK3 comprises 3SX and 3TF. At the present time these two chaps are gathering quite a good selection and it is hoped to make an official handout in about three months.

LIBRARY

Starting from next month it is hoped that an abstract of technical do-it-yourself articles that appear in the latest magazines received by this Division will be included in these columns or elsewhere in the magazine.

The advantages of this are obvious. If the tenor of an article appeals to you, the obvious thing to do is to drop me or Mrs. Forbes a line and if it's available, it will be forwarded to you. Of course the usual conditions of borrowing will apply! At the same time I hope to give you a partial list of magazines received, and reference books in the library.

COUNCIL ITEMS

It is hoped that a report of the work of the VK3 Council will be a regular feature of these notes from now on. Under the chairmanship of President David Wardlaw, Council had one of its liveliest discussions on a number of topics at its last meeting.

The most important matter raised was, of course, the Federal Council meeting at Easter. Council heard a detailed report from Federal Councillor, Alan Elliot.

As you know, VK3 moved: "That it will be Federal policy of the Wireless Institute of Australia to press for an administrative system that embodies the principle that frequency allocations and regulations are made by or on the recommendation of an independent disinterested body or tribunal before which interested persons or bodies shall have the right of public hearing before any decision or recommendation is made that affects them."

This was one of the motions carried by Federal Council, and now goes to be ratified by the various Divisions in due course. In view of the importance of the matter, VK3 Council has appointed a sub-committee to advise on the problems involved. Michael Owen was appointed chairman.

Another sub-committee was appointed to report on methods of improving the attractiveness of the Institute. One proposal that the sub-committee is expected to consider is a proposal that a new improved technical library should be set up.

Council recommended the reappointment of the present Federal Executive for another year, namely, President G. M. Hull, W. T. S. Mitchell, G. Glover, D. Rankin, P. Stranghair and B. Boase.

Council also discussed the next State Convention, which will probably be held in November; W.I.C.E.N., including the possibility of incorporating v.h.f.; and as well discussed finances at considerable length.

Hardly surprisingly it was quite late when Council eventually adjourned.

MELBOURNE UNIVERSITY AMATEUR RADIO CLUB

Formed only recently, this group looks like producing some excellent magazine material, if not the ultimate in secret weapons. For how could it miss out with characters like "Pro" 3ZIS and 3AKJ on the committee! I understand that Ron 3AUB was also co-opted to complete the quorum. 3ZIS had better look to it and provide me with some information from time to time, otherwise I'll reveal some of his schoolboy scandals!!

IN CONCLUSION

My high flying spies tell me that all sorts of conversations, complete with topics, take place on the bands these days! I only suggest that these chaps who indulge in insurance and h.p. comparisons find 20 willing and eager salesmen on their door steps. Then there'll be some scatter and it won't be forward!

Having thus exhausted the space I look forward to hearing your news and views for next month. 73, 3IZ.

WINNERS FOR 1960!

A.R.R.L. Handbook, 1960 Edition

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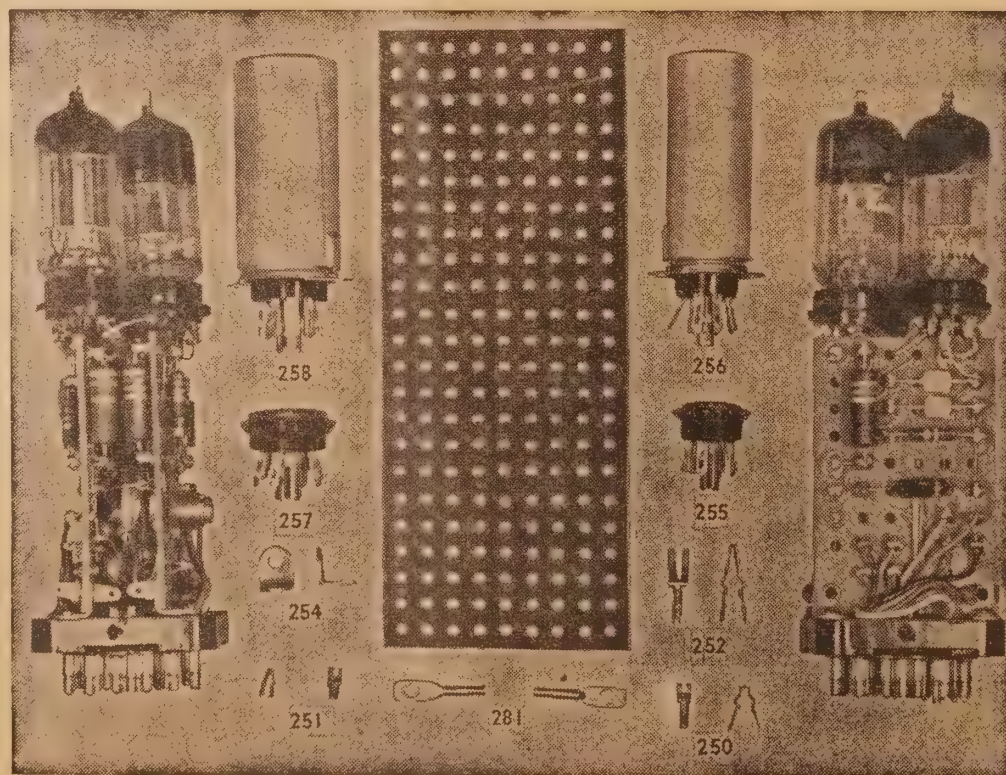
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QUEENSLAND

BRISBANE AND DISTRICT

Activity in Brisbane seems to be on the up-surge and one thing really deserves mention. In the early post-war disposals boom it was nothing to see a crowd of the locals working to pack disposals gear. Well, the date, 1st May, 1960, deserves a special mark on the calendar because we had a "working bee" at the QTH of Fred 4VB to pack all the tubes which were ordered by our members from the recent disposals package we received from South Australia. At 9.30 a.m. the blokes who volunteered to pack the tubes arrived at the QTH at Seven Hills and got to work unpacking and sorting the contents of six huge cases. We had Fred 4VB, Stan 4SA, Evan 4EF, Paul 4VS, Graham 4LW, Associate Peter Brown and your scribe working like steam opening the cases and sorting a couple of thousand tubes. It wasn't as easy as that; the tubes had to be converted from English CV numbers to English Commercial EL, KTW and "letters like these" numbers and, finally, to American numbers. Then we took the lists you had sent in and got 'em into stacks which were packed by Stan and Evan.

One humorous point about the tubes concerns the 6U5s which were advertised in "QTC"; if you ordered any of these Magic Eyes, you've had it, because the CV number for 6U5 ends in 98A and the tubes supplied end in 98 only. These "98s" are cute little things which have 8.5 volt filaments which take 4.6 amps., have a maximum anode voltage of 28,000 volts, have a plate dissipation of 750 watts and have a water cooled anode. I don't think they could be used at reduced ratings for 150 watts input. We have heard since then that a mistake had been made and the tubes will possibly be shipped back. There are still plenty of tubes left at 15 for £1 or singly at one and six each, and we will give you the details in "QTC".

I guess you have seen those maddening crossword puzzles in the morning paper which, for a zack and a correct entry, can win you thousands of quids. Bill 4ZBU and his XYL, sent in many entries and one of them won them £7,535. Congratulations, Bill and Lyndall.

You have probably seen the advertisements for the Heathkit "Apache" transmitter and thought what a beautiful looking job it is. Well, Charlie 4RQ has an "Apache" and the same company's sideband adaptor in near to complete state and I can tell you that they are as beautiful inside as they are from the panel view. He is getting the matching rx and will be one of the State's top DX men before very long. I think he has worked over 100 countries in the few months he has been active.

Fred 4VB has a beautiful rx now which comes from across the Atlantic from the Heath factory. It is the Italian Geloso Receiver which costs well over a hundred notes and it is a tonic to hear it put through its paces.

Well, that's it for now; see you again next month. 73 from 4PR.

TOWNSVILLE

Band conditions being what they are, it is difficult to find sufficient news to have quite lengthy notes, and can only give a brief summary of what I hear most chaps are doing through very patient listening on the various bands. Heard recently on 10 mx that the two west-end twins, Eric and Len, contemplating opening up on 288 Mc. and after being successful will try 144 Mc. This should make the Z boys happy if the project is carried through to fruition. Eric seems partial to metal clad 807 (less risk of breakage).

Very sorry to report that Bob 4TK is an inmate of the local hospital with eye trouble and on a visit before the operation seemed in good spirits and was quite pleased to have the visits from the local boys in person; quite different to hear them except over the ether waves. Bert 4LB just returned after a very brief visit to the Tablelands and took the opportunity of meeting the various chaps and was unable to bring back that beaut. rx from Atherton. Reports all the gang are doing well and have a grouch of not receiving their "QTC" from VK4 W.I.A. Just wait boys till our new Secretary settles in. Stan has given his word that the country boys will find no complaint henceforth!

Claude 4UX expressing great confidence that when the results come out that his class almost 100 per cent. in getting their tickets. Believe he was dumbfounded when one of the class members asked how was it he was heard on a local t.v. set? (You beaut!) Saw John 4DK recently and he hopes to shift the shack inside the house and take a little well earned relaxation and work the nets again. Bob 4MF toying with the idea of s.s.b. and reduced his Quad to one band operation. Very happy to report since Brenda's visit, Ted 4EJ has sport-

ed a new fence, apparently no more fishing the chains being used on the fence, fronting the newly formed road. The Sydney gang please note, and no rude remarks.

Believe that at long last Jim 4DH has returned to the air, must be that old age and like me need a less strenuous hobby. Welcome to the air, Don 4ZDM and your 2 watts finally made it to Japan. Hope that the new rx comes up to expectations. Ken 4ZAK must be a lucky chap as at a recent disposal ballot in Brisbane he almost scooped the pool. Charlie 4BQ recently settled in to the discussion and should make the "ragchewers" club with no trouble at all. Will be sending a copy of a letter to the various chaps in the far north, do the right thing and talk to your Federal Member along the lines expressed in "A.R." on frequency allocations. Can anyone help out in looking for VK4IA who worked me from Willis Island 31/7/55 and did not QSL.

Again during Easter week-end the 50 Mc. band opened while I was away and Charlie 2ADE informs me that on the 18th April at 7.18 p.m. A.E.S.T. he heard ZC4 calling ZS1AC on c.w. but got smothered by JA signals and he could not make the grade, and from 7.45 p.m. to 10.15 p.m. heard K6HGP/KH6 working VK3, also at 8 p.m. heard two WK6 on phone but they would not answer c.w. Again on 19th, 9.30 p.m., heard two chaps speaking rapid Spanish, could have been HC1FS (I thought they were an image on my rx, Charlie). On 23rd, Bill 4ZBE worked KR6RB on Okinawa and later heard him contact 9M2DQ. Jim verified his contact with KR6 when I spoke to him on 21 Mc. KL7BTW is portable at Guam on 50 Mc. though no break through to VK as yet.

On Saturday, 30th, 11.20 p.m., managed to snag 9N1TB in Nepal on 21 Mc. for his first VK4—73 Bob.

SOUTH AUSTRALIA

Listed in the hierarchy of the VK5 Division you will find one Warwick whereabouts Parsons, a character who has, for some years been Publicity Officer, and, but for a brief interval, has been, and still is, our scribe. Just how he has scribed is possibly too well known to you all, but one thing you may not know is that he works for a living!! At least by assumption it is gathered that it is so, in fact it must be, because as this is written that gentleman is on annual leave, and we all know that it is only the unemployed who do not enjoy an annual leave.

Now having deduced that he works (or presents himself for employment—we have no guarantee of which) it is to be assumed that he is paid for such, so the big mystery is what does he do with the emolument that must be placed in his hot fat little fist each week?

I'll let you into the secret, just in case you missed the Easter Sunday Divisional Broadcast. Poor Pansy is unfinancial—hasn't paid his current sub—so for the present, is outlawed, cannot attend meetings, cannot write these notes, his weekly publicity via the local paper is "pro 5PS", cannot throw spanners at meetings. In fact this was never more evident than the night we all went to Channel 9 t.v. station for a look-see. No Pansy, for he wasn't game to show up and have gimlet eye Lloyd throw him out.

Bad luck old man, we are taking the hat around and hope it will be fixed soon, the sub.—not the hat!

I wonder how many members of our Division know how the various jobs done by Council members and supernumeraries are allotted, determined, undertaken, or just plain done. Not many I'll bet, but it is an interesting sidelight on administration to learn for the first time.

After Council is elected by the membership, that august body meets and from its midst elects a President, who for the last decade or so has been the Senior Vice-President of the previous year. Then the fun starts, for there are many committees, special duties and offices to fill, and if all the new Council are present at this first meeting it has been found hard to fill all those posts. But let a couple be away from it and the President has no trouble at all for the absentees by some mysterious means fill all of the unwanted and difficult roles. It is nice of them to so volunteer, otherwise we would never get started.

The act of volunteering to any post is easy, all you have to do is catch the President's eye, in other words be too slow to avoid him and his gimlet eye, and you are for it. Oh no, you are not forced into any job, it's all willingly done by this eager volunteer method. Hence the carefree easy way all tasks are performed.

It behoves more members to seek Council election for until you have a turn at it, you do not realise the pleasure you can get from

this aspect of our hobby, that is, by doing something for it and for the common good of the other members similarly interested.

The visit we did to Channel 9 t.v. station in North Adelaide constituted the monthly meeting, which was attended by the largest assembly of members seen together at one time.

We are most grateful to John Batchelor and his henchmen who conducted the many tours over the station and for the painstaking way in which they explained the many complex functions of a multiplicity of electronic gear that left most spellbound. From A to Z the station is manned by enthusiasts, all young men, in whom the future of the industry must rest. No doubt it takes young shoulders and minds to absorb the details of this new media.

President Lloyd 5OK, on his own, and on behalf of all those present, thanked John for his patience in showing the party over and asked John to convey many thanks to the management for permitting such an invasion and to the other members of the staff who assisted in the conduct of the tour.

The "conductors" must have heaved a sigh of relief when the crowd disbursed for there was never so many questions answered by so few in such a short time.

Sunday mornings, at the post session call back, all kinds of queries are efficiently answered by operator Gordon 5XU, or anyone else on the hook if he doesn't know the answer, but when I ask an innocent question of him, and Pansy replies, it's really coming to something. Ever think how you get your name and activities into these notes? Pansy listens, and listens, and listens, and doesn't miss a trick, so be careful in future. He won't come on the air (his tx is permanently connected to a fence in the hills somewhere near a race course) so he gets on his tricycle and puffs his way to Gordon's and lets his verbosity have, play from there. Result? Utter confusion of monitoring bods.

Easter and Anzac week-ends saw a renewal of activities on 7, when quite a few bobbed up again after a lapse, including Brian 5EM who, it is now understood, is in new quarters and after five months with the switch "off", came on the air with no pre-dusting or adjustment. Some portable activity by Les 5AX and Lester 5LC at Victor Harbour provided some interludes down there and some activity from Pat 5KM spurred them to flatten a battery or two.

Lance 5XL busy getting his new rig going with a new Geloso exciter, in fact quite a bit of re-building going on. Wonder why? One-eyed monster viewing may be. Ian 5QX heard telling the gang that XYL and the new harmonic now back home and that he had sent (sent mind you) ma-in-law back to VK3—what a man. Anyway, some adjustments going on in that QTH and additions of another nature also in a new tower and beam.

Elizabeth is fast stealing the title from Ham Happy Woodville for there appears new call signs almost each week from that Cinderella City. They have now clubbed together (self defence maybe) and find it no trouble to round up a dozen at any meeting. In fact if you listen carefully you will get that number in your hair at Elizabeth any time you like. A fine bunch of chaps who between them have the clues and certainly get their share of DX.

Tubby 5NO hasn't moved yet, still looking for that ideal QTH, try One Tree Hill, Tubby, anyway with a new beam and tower he and Son 5NQ should be able to knock 'em down very easily from now on. Geoff has a score of 107 for DXCC after what seems like only a few weeks operating, so what's wrong with present address?

Ken 5BS is on holidays at time of writing. Cyril 5BY very busy building a plumber's delight, whilst Harry 5EU is on again with re-arranged gear in a new shack. 5KD is on only sometimes, very busy on the study these days, with 5HA threatening to come on any time now. Ron 5FY is finding gardening an all absorbing pastime (so they say) with not much spare time or energy to pound the key. Come on Ron, 6 mx to the North and be in it, your pal awaits. 5EJ on 40 also in a new shack, no peanuts at Elizabeth by the sound of things.

Tom 5AQ has now finished his mobile rig and after a try out on the bench is very busy mounting it in the trusty vehicle. Most people try out these kind of things with someone really close in, but not Tom. A KH6 aided him in the test and adjustment!!

Our other Tom 5TL, who is still using his kw. final, found his dial was slipping and requested advice as to correction. Gordon and a few of us who were quite concerned with the prospect of Tom's dial staying slipped for all times were frantically looking up phone numbers of plastic surgeons and the like when it resolved itself, that the dial was on the rx.

Then quite a few told him what to do with the dial—so easy if you know the real answer. Anyway, apart from that he is having great

fun with a 22 on the front lawn using a rod antenna which is available for fishing if the conditions are bad.

Did you hear the truth of Luke 5LL and the car that backed into his front-end? A little bird tried to tell me but got mixed up with QRM so as far as is known, Luke was not hurt beyond his dignity. Glad I wasn't the backing driver!

Bob 5RI joined in the melee last week when conditions were medium only and was the strongest on the air; understand Bob has the 240 there now with all its "attendant" benefits.

Country members please note that Ian 5QX is on the air each Thursday night at 7.30 p.m., 40 mx, to take any queries from you; he is the membership organiser on the Council this year and is there to help you.

Just in case the v.h.f. boys miss this for the issue, it is advised that VK0WH, who is at Macquarie, is putting a tape signal on the air nightly from 1830 to 1930 C.S.T. on 50.19 Mc. Who will be the first?

Mt. Gambier reports that at a recent meeting, Bob Tester came to light with a picture of a multi-element t.v. antenna with the query how it is fed. The answers ranged from eye dropper, spoon, force, to 300 ohm ribbon.

Erg's XYL makes too good a sponge to feed to antennae anyway, so the boys had it instead. Stewart 5MS has forsaken the axe for work, much safer; Leo 5GJ now has the tower to bits and ready to re-assemble. Claude 5CH and Tom 5TW again on 40 to good result, not forgetting Col 5CJ who helps himself to sponge cake and 40 mx.

A film evening organised by Oliver Maddex and Claude 5CH provided real interest on tube manufacture (radio not water) and the heavy-side layer at their last monthly meeting. Doc 5MD, who with party was en route to Canberra, dropped in on the boys, much to their delight.

Erg 5KU had trouble with the rig after a spell from it to find each section progressively jacking up. Gremlins, Erg, nothing else.

As a closing shot, the automobile accident had a calming influence on only one part of the body, namely the right foot, hence there is less kick available from that side. Very strenuous efforts are being made now to learn the correct and effective use of the left foot for salutary gestures by that member, so it won't be long now. Anyway, it would not need very good aim to make certain of a direct hit on Pansy, so maybe we will try it out even at this stage of education.

WESTERN AUSTRALIA

The Annual General Meeting of the Institute, which was held on 19th April, brought the usual attendance at the Mends St. Hall, South Perth. At this meeting, a change of constitution of this Division was carried unanimously, and now means that anyone who has an interest in radio and electronics can join the Institute as an Associate at the subscription rate of 30/- per annum. This is what we have long waited for and we already have fourteen (14) s.w.l. members waiting to join. Copies of the Constitution will be forwarded to each member for their retention.

Also at this meeting, the President 6HR and the QSL Manager 6RU tendered their reports. 6HR was very pleased to report that membership had grown to 137 and the circulation of "A.R." had reached 152 during his two year term of office. Through the past year lectures were given by VKOAT on Antarctica, R. Hilliard IBM on Electronic Calculators, 6JS on Travels through world cities, 6AG Questions and Answers, 6LS on three channel carrier telephone, and F/O. Lance Howard, D.F.C., on the Dam Busters.

Jim 6RU reported that there were not as many cards passed through the Bureau as the previous year which was a record year. The assets of the Bureau stood at, stickers totalled £1/11/0 and stamps totalled £4/9/11. This is a good way to end the year, so on behalf of all the members, I feel sure I can congratulate Lou and Jim on the splendid job they have done during the past year, and also the complete retiring Council for the part they have played in helping the waters to pass under the bridge smoothly, and quite a volume has passed this last 12 months.

It looks as though the VK6 Division will at last have their own building to be used by the members for housing equipment and conducting meetings, etc. Thanks to Cole 6GS.

The Federal Councillor went to Melbourne on Easter Saturday to attend the Federal Council at which frequency allocations were discussed and agreed to.

A Memorial to the 'Silent Keys of the VK6 Division has been constructed by 6AG and 6WS to be displayed in a prominent position. The cards to hand at present are 6FJ, Fred

OBITUARY

BERT CONGDON—VK6BC

It is with regret that we have to advise of the passing of VK6BC, Bertie Congdon. Many an Amateur of VK6 owes a debt of gratitude to Bert for the enthusiasm that was always applied in the imparting of the necessary knowledge to achieve the A.O.C.P. He founded the Subiaco Radio Society, the first Radio Club in Australia, and saw it grow until it has become the Radio Society of W.A. Bert saw service in the first World War which left him with an impairment in his health. But even in World War II. he conducted morse classes tirelessly.

Bert spent almost his whole life in the Postal Service, and retired a couple of years ago. Even then he was never idle, and only a week before his death he was heard on the air.

Sincere sympathy is extended to his wife, children and grandchildren.

Kemble; 6MW, W. Weston; 6MN, S. J. Madden; 6FT, F. Tredrea; 6EL, E. Langenschied; 6BN, A. F. Stevens; 6RT, L. Trunfull; 6JG, J. Goddard; 6GR, A. Rippen; 6CA, C. Bold. These Silent Keys have left behind them many friends who remember them and what they did for Amateur Radio. It was suggested by 6AG that anyone wishing to have their card placed on the board, would he kindly forward it to him (IMI)—what did you say QRM, QRN, etc., very bad).

Congratulations to Fred 6UF on taking unto himself a YL and converting her into a XYL. We all trust Fred that you both will be very happy and have long life together in harmony. Please don't forget Amateur Radio. Fred is building a very nice home out in Cannington and his three tall white masts are a very impressive sight.

Here we must reminis for a moment for the other day 6MO was heard on 40 mx. 6MO was, at one time, the official call sign of the Magnet Observatory at Waterloo. It is retained now by Alen Parks (who had spent many years there in an amateur capacity), a happy reminder of nearly 20 years' association of the original Magnet Observatory. It is well that such historical calls should be carried on. Here we take the opportunity of welcoming 6RM at Troughton Island as a new member of the W.I.A.

The Easter week-end brought many portables and mobiles out, and it sure was a lovely week-end for it. Among those heard were Bernie 6KJ, Francis 6WD, Harry 6ZZ, Herb 6XO, John 6EW, Cole 6CS, Tom 6TK, John 6JM and Jack 6BU.

Peter HP7CC/MM, aboard the tanker Alvenus, was heard on 80 mx around the coast of W.A. on his way to the Eastern States. He was worked and kept busy by Tan 6CL, Clem 6CW, Wally 6AD, Francis 6WD, Skipper 6WS and Pat 6PH. Signals faded out both ways when Peter was off Esperance in the Bight, and we worked him again on the way back.

In conclusion, I must mention the Slow Morse. This will be starting (all going well) very soon, and the times will be for one hour after the News Sundays, on 40 mx, seven to eight p.m. on Sundays, Tuesdays and Thursdays on 80 mx, so please give us your support.

It is with regret that we announce the passing of Bert Congdon, 6BC. Many VK6s owe their A.O.C.P. to Bert, to whom it was never any trouble when it came to helping anybody in Amateur Radio.—6PH.

TASMANIA

Paul 7PJ was instrumental in affording some of our members the opportunity to perform a valuable service to those unfortunate people who suffered damage to their wireless rx's and radiograms as a result of the devastating floods in the Derwent Valley over the Anzac Day week-end, and our gratitude is due to both Paul and the other helpers for helping to maintain the good name of our Institute.

Chas 7CH has removed to Lenah Valley and should now QRM Rupe 7RM and Edgar 7RY much more effectively. Ted 7EJ, our Federal Councillor, forfeited quite a deal of his Easter week-end to journey to Melbourne to attend the Extraordinary Federal Council meeting held there at that time. Ted had intended to use the four-day break from work to continue his home renovations, so we can appreciate even more his readiness to attend this meeting at such short notice.

Myles 7MF is now the envy of many of us after receiving a QSL card from a VP3. I have not even heard one of these very rare DX stations. Jack 7JB has got his G4ZU beam up

in the air on a 25 foot tower. His tests show locally a back to front reading varying by four S points. A little more adjustment to bring the 14 Mc. portion of the beam up to pitch, and Jack should do even better in DX contests in the future than he has done over the years.

The only VK7 Amateur to suffer damage or loss from our severe floods was John 7AG. He tells me that three houses on his property at Bushy Park were flooded and that he lost about 50 sheep downstream.

Our May Divisional meeting was fortunate to have Mr. Hutchins, of the Marconi Co., address us on Television Studio Equipment. Not only did he illustrate the equipment diagrammatically, but he produced certain equipment exhibits and altogether it was a well received and most enjoyable lecture.

Tom 7BT has again equipment capable of putting out a signal, so he should be heard much more frequently in future.

HAMADS

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Advertisements under this heading will only be accepted from Institute Members who desire to dispose of equipment which is their own personal property. Copy must be received by 8th of the month, and remittance must accompany advertisement. Calculation of cost is based on an average of six words a line. Call signs are now permitted in Hamads. Dealers' advertisements not accepted in this column.

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SELL: Advance E2 Sig. Gen. 100 Kc.-100 Mc., as new. B28 Comm. Receiver, good cond. VK5KD, 95 Fairfield Rd., Elizabeth South, S.A.

SELL: Ant. Coupler, new, from Tiger Radio (England), multiband tuner "Z Match" type, in hammertone case, £13. VK3JK. Mornington 3183.

SELL: Comm. Rx SX42 550 Kc. to 108 Mc. Offers wanted to £100. S. Widgery, 39 York St. West, Ballarat, Vic.

SELL: Membership in W.I.A. Apply to your Divisional Secretary for full details.

SELL: R1155A Communication Receiver, good condition, £12/10/-. Aegis KC4, 4-band Tuning Unit, a complete factory wired front-end; r.f., osc., mixer stages, bandspread 80, 40, 20, 15, 10; bandset and bandspread 55/1 slow motion drive assemblies and calibrated dials; with values and circuit, £12/10/-. VK3ZCP.

SELL: Surplus equipment. Eddystone 680 receiver. ART13 transmitter with 28 volt power supply and manual. TA12 transmitter, FS6 transmitter, prop. pitch motor. What offers? N. Templeton, Coleraine, Vic.

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WANTED: Com. Receiver, good condition, AR7, AMR101 or similar. Full details. B. W. Bartlett, VK4ZCG, 35 Woodville Place, Annerley, Brisbane.

WANTED: "QST" May 1949, buy or loan. K. Postler, Hilltop Ave., Teatree Gully, S.A.

ARTISTRY IN

Metal

Metals play a vital part in our modern civilization, yet man has known and made use of them for countless centuries. Even before the beginnings of history, men had learned to fashion delicate ornaments from gold. Indeed, gold was the first metal ever worked by men, who, fascinated by the beauty of this versatile metal, prized it highly and constantly sought after it.

The discovery of copper is veiled in mystery, for how primitive man could maintain sufficient heat long enough to smelt copper ore is hard to tell. Nevertheless, copper was discovered, soon followed by bronze, which was suitable for tools and weapons of war, Roman arms and armour being made almost entirely of it for most of the Roman era.

Iron was known over 3,000 years ago, but was not used widely until much later, when the peoples of Eastern Europe, the Caucasus Mountains and the shores of the Black Sea discovered a method of tempering. Gradually iron displaced bronze, until today it is the mainspring of our civilization.

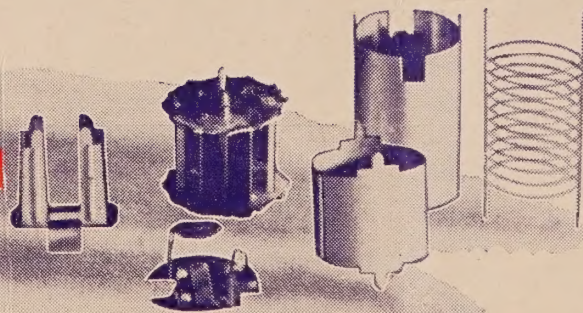
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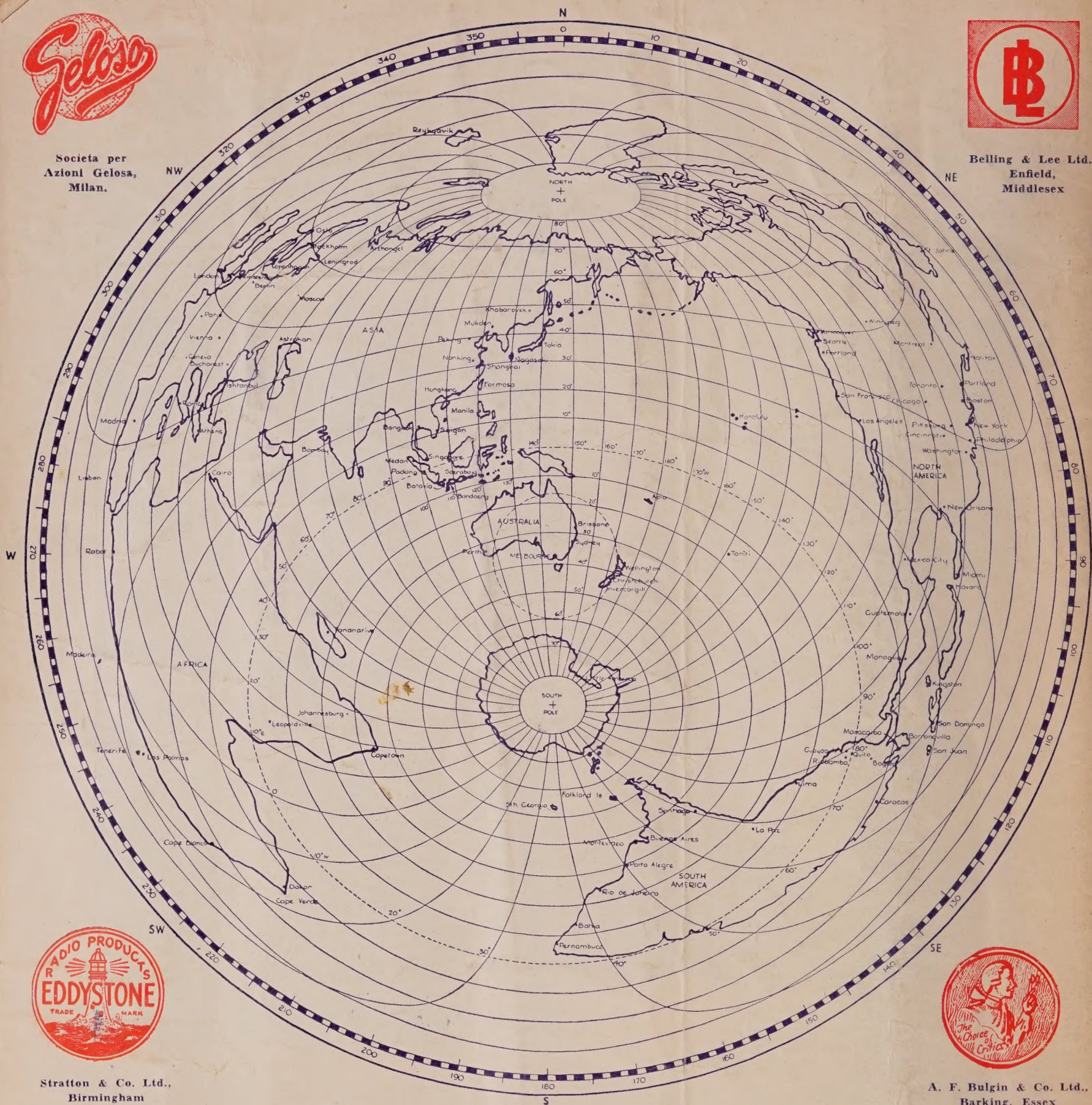




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